Calabashes and bottle gourds from Suriname

A comparative research between Maroons and Amerindians, with a case-study in Konomerume, a Kari'na village

Irene R.M.M. Meulenberg

Cover: calabash cups between the dishes in Konomerume (photo by Meulenberg).

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Chapter 1 Introduction

1.1 Research motivation

This thesis is about the calabashes (*Crescentia cujete*) and gourds (*Lagenaria siceraria*) and how they are used by both Amerindians (indigenous people) and Maroons (descendants of run-away slaves) in Suriname. The main focus of this thesis will be on the fruits of these two plant species, rather than on other plant parts. Not only because the fruits have a higher chance of being found in the archaeological record, but also because the fruits are highly valued for their characteristics (Heiser 1979; Price 1982, 1993; Price and Price 1980, 1999). However, other parts of these plants are also used by the population of Suriname (Andel and Ruysschaert 2011, 118-120, 182-183), and can be found in markets in Suriname, where both fruit species as well as the leaves of the *Crescentia cujete* are sold and used during *Winti* practices (Andel *et al*. 2007, 365-366), an Afro-Surinamese religion (Andel and Ruysschaert 2011, 521; Bruining and Voorhoeve 1977, 678-679; Wooding 1979).

These plant species are known in the archaeological record (Dimbleby 1978, 82, 84; Doran *et al*. 1990; Erickson *et al*. 2005; Haviser 1999, 246; Lema 2011; Oliver 2008, 207; Pearsall 2008, 108; Pickersgill and Heiser 1977, 815-816; Piperno and Pearsall 1998, 140) and are occasionally found in the pre-Columbian Caribbean as archaeological artefacts (Conrad *et al*. 2001, 12) due to their perishability, which influences most material culture (Drooker 2001, 5). However, the knowledge about calabashes and gourds is restricted to other sciences than archaeology (Arango-Ulloa *et al*. 2009; Gentry 1977, 1980, 1982, 2009; Heiser 1973, 1979; Teppner 2004; Robinson and Decker-Walters 1997). Often the scientific distinction between these two plants is only made by biologists, whereas others recognise the difference between the two species and the implications for the users (Bel 2009, 44-46; Duin 2000/2001, 54). The distinction between these two plants in fields other than biology was explicitly made by Price (1982): her distinction was focused on the use of *C. cujete* and *L. siceraria* among Maroons. Not only is this distinction important for Maroons and other Afro-Surinamese people (Creoles, descendants of African slaves who worked on the plantations), but also for Amerindians who have used these fruits since before the discovery of the Americas by Columbus (Erickson *et al*. 2005, Price 1982). However, it seems that after thirty years this distinction is still not explicitly made within the archaeology of the Caribbean, or at least it is unclear to which species the writers refer (Conrad *et al*. 2001, 12; Olazagasti 1997, 139; Veloz Maggiola 1997, 43, 45). As such this thesis will try to make a clear

distinction between the two species, and to give an overview of their use, production, decoration method, iconography and socio-cultural context.

Knowledge about the calabashes and gourds used by Amerindians in Suriname is sparse (Ahlbrinck 1931; Coll 1886; Goeje 1906, 1908; Gillin 1936, 1948; Kirchhoff 1948; Penard and Penard 1907; Roth 1924; Stedman 2010, 413), as they have never been the subject of extensive research, whereas Maroon calabashes and gourds have been frequently researched in the past (Dark 1951, 1952, 1954; Herskovits 1951; Koopman-Karg 1995; Muntslag 1979; Price 1982, 1993, 2003; Price and Price 1979, 1980, 1999). For example, a categorisation of the use of calabashes and gourds is made for the Maroon society (Price 1993; Price and Price 1980, 1999), but is lacking for the Amerindians. The literature dealing with Maroon calabashes and gourds shortly states the use by Amerindians (Price 1982, 1993; Price and Price 1980, 1999), but it was never extensively researched. A detailed overview of the calabash and gourd preparation, use and decoration among Amerindians is lacking. Therefore, the main focus of this thesis is to give an overview of the use of the *C. cujete* and *L. siceraria* among the Amerindians of Suriname, with a focus on the Kari'na, a coastal group of Carib speaking Amerindians. Specifically the Kari'na village of Konomerume, along the Wayombo River, will be investigated, as research among the Kari'na is often focused at Galibi on the eastern coast (Ahlbrinck 1931; Kloos 1971; 1975b; Spillebeen 2002-2003; Vredenbregt 2002; 2004a; 2004b). The village of Konomerume was chosen, as it was one of the villages which participated in the "Sharing Knowledge and Cultural Heritage Traject" by the National Museum of Ethnology in the summer of 2009. Another unresearched field remains the decoration and iconography of Amerindian calabashes and bottle gourds (Duymelinck 2007; Penard and Penard 1907, 1907-1908; Vredenbregt 2002, 2004a, 2004b), and will be shortly investigated.

An overview of the calabash and gourd use among Maroons is of importance in order to address the question whether the two groups influenced each other, as they lived in close contact with each other (Agorsah 2007, 336; White 2010, 469). Not only did the run-away slaves settle next to the Amerindian villages, and served as trade-partners with a pidgin language as result (Carlin and Boven 2002, 21, 24-26; Pollak-Eltz 1970, 172), they also adapted for example the shifting horticulture strategy (Thoden van Velzen and Hoogbergen 2011, 3) and religious elements of Amerindians (Pollak-Eltz 1970, 184). It can be assumed that the contact between the two groups was even closer than previously imagined (White 2010, 477), and as such that the use of calabashes and gourds was mutually influential.

1.2 Aims and research questions

The aim of this thesis is to give a detailed overview of the use of calabashes and gourds by Amerindians in Suriname, and to complement and compare this information with the detailed research already done among Maroons. This in order to get information about the possible exchange of ideas and methods with regard to calabash and gourd selection, production, use and decoration, when these peoples were forced to cooperate with each other as a result of escaping the enslavement on plantations. Price and Price (1980, 154) state that calabashes and gourds can be seen as important exchange items. Without considering the Maroon calabashes and gourds it is possible to overlook possible influences on the use of calabashes and gourds by Amerindians and to assume that it is an uninfluenced Amerindian tradition. Another aim is to make a clear distinction between the calabash (*Crescentia cujete*) and the bottle gourd (*Lagenaria siceraria*) and their biological family, use, production, and decoration by Amerindians and Maroons. No only will become clear the importance of these fruits for contemporary societies, but these fruits were also important for the material culture of past societies. Taking everything in consideration the following research questions will be considered:

- What do we know about the use, production, decoration and iconography of calabashes and gourds by Amerindians and Maroons in Suriname?
- Has there been exchange in the way of using, producing and decorating calabashes and gourds between Amerindians and Maroons?
- What are the implications of these items for pre-Columbian archaeology?

1.3 Methodologies and approach

This research will use different kinds of research sources: a literature study, an object study of the Suriname collection in the National Museum of Ethnology in Leiden consisting of 382 objects made of calabashes and gourds, and 41 calabash and gourd objects from the Stichting Surinaams Museum in Paramaribo. Furthermore, fieldwork undertaken by the author in a Carib village in Suriname will supplement the knowledge already available from literature and the object study, as some aspects remain unknown if we stay behind the desk and observe museum objects out of context and never go into the field.

Chapter 2 will discuss the calabashes and the bottle gourds from a biological perspective, e.g. botanical family, shapes, sizes, and fruit structure. Furthermore, their natural dispersal and the distribution around the world by humans will be discussed, as well as their general procurement and use by peoples. Due to the extensive study of the

objects in the National Museum of Ethnology in Leiden the differences between the fruits of the *Crescentia cujete* and the *Lagenaria siceraria* will be discussed and supplemented with the author's own observations. All these items will contribute to make explicit differences between these two different fruits clear. As mentioned before, in archaeology the distinction between the two is often not clearly made.

In Chapter 3 Suriname will be introduced with its geological and climatological aspects which influence the preservation of organic materials in the archaeological record, and as such calabashes and gourds. The general aim of this chapter is to give an overview of the archaeology and history of Suriname. Especially as it can be assumed that early pottery had a similar function to calabashes and bottle gourds as these were used for beverages and wet food, and that early pottery was used next to their perishable counterparts. Even the morphology of calabash and gourd vessels was applied to pottery, whereas the decoration of pottery can also be found on calabash and gourd objects (Conrad *et al*. 2001, 12; Rodríguez Ramos *et al*. 2008, 58-59). Archaeological experiments suggest that clean empty calabashes (*Crescentia cujete*) were used as moulds for pottery (Gijn and Hofman 2008, 25). As such it can be assumed that calabashes and gourds served as examples to early pottery, not only in shape, but also in applying decoration. Another reason to give an overview of the archaeology is to compare the present-day decoration and iconography of calabashes and gourds with those of archaeological found pottery. Especially, as Boomert (1986, 47, 49) argues that the Kari'na pottery is evolved out of the archaeological known Koriabo culture based on pottery shape, decoration techniques and temper material (Boomert 1986, 47, 49; Vredenbregt 2002, 36). The historic part gives an idea of what influenced the societies of today as these are the subject of Chapter 4 and 5.

The fourth and fifth chapter are about the use of calabashes and gourds in respectively Maroon and Amerindian societies. The collection of the National Museum of Ethnology supplements the knowledge from the literature. No exceptions were made with regard to culture, as this collection was not yet described, or even extensively researched. Indeed some objects were researched in the past by Sally and Richard Price (1979; 1980), but not all objects. It was decided to investigate all possible calabash and bottle gourd objects as this was the only way to gain knowledge about the differences between the two species, between different cultures, and not to overlook a-typical objects, as the descriptions of the objects in the database system of the Museum of Ethnology were rather sparse which to the author's opinion could not lead to a selection of objects. An additional 41 objects come from the Stichting Surinaams Museum Museum in Paramaribo. The ratio between Maroon or Creole objects and Amerindian objects was not even for the National Museum of Ethnology: the Amerindian calabash and gourd

collection from Suriname is much smaller than objects of Maroon or Creole origin and could be supplemented with some objects of the Stichting Surinaams Museum.

Chapter 4 gives an overview of the calabash and gourd use within the Maroon society, especially among the Saramaka Maroons as most of the research has been carried out among this tribe (Price 1982; 1993; 2003; Price and Price 1979; 1980; 1999). Not only will be investigated how these objects were used, but also an overview of the developments which influenced the calabash procurement and decoration will be given. In some occasions objects used by other Afro-Surinamers like Creoles will be given as the history of Creoles and Maroons share a common origin and we will see that they will influence each other through time.

Due to the lack of research among Amerindians an inventarisation is made of how calabashes and gourds were used by different Amerindian groups in Suriname. This will be the subject of Chapter 5. The knowledge is sparse and will mostly focus on the Kari'na, an Amerindian Carib group from the coastal region of Suriname. The general literature will be supplemented with ethnoarchaeological research in Konomerume, or Donderskamp, a Kari'na village along the Wayombo River. Ethnoarchaeology is a research strategy which studies the material culture in present day societies in order to understand processes which led to archaeological evidence (David and Kramer 2001, 2; Gosden 2005, 95, Johnson 1999, 52). It tries to explain archaeological evidence by drawing analogies between the present and past. The more comparisons can be made the more analogues the situation is (Johnson 1999, 48). This research strategy involves fieldwork which can be complemented with studying museum collections or archival research (Gosden 2005, 95), which is also done for this thesis. Eventually a comparison will be made between the two different societies and their calabash and gourd use, production, decoration and iconography not only in the present, but also in the past.

Supplemented with this thesis are appendices which give an overview of all the studied calabash and gourd objects in this thesis from the National Museum of Ethnology (Appendix A and B) and the Stichting Surinaams Museum (Appendix C), in order to compare these objects. Appendix A gives an overview of the different collections. Since every collection has a specific number and every object has an identification number. An object is thus referred to by a two-part accession number: for example object 360-5696 is a banjo from the 360 series also known as the collection of the Royal Cabinet of Curiosities. Objects can be looked up by their accession number in Appendix B and C. Appendix D gives an overview of collected decoration designs from the Kari'na Amerindians. These appendices contain complemantary and essential data for this thesis, which contains the most comprehensive up to date knowledge on this topic and might be the basis for further research.

Chapter 2 Natural setting of bottle gourds and calabashes

2.1 Introduction

Calabashes and bottle gourds are two plants which are used by humans for a variety of purposes. They are mentioned in the ethnographic literature as resources for utensils, musical instruments, and even as medicines. Various researchers use the terms "calabash" and "gourd" as synonymous terms for the same plant, or mix the two terms together for one plant species (Price 1982, 69; Heiser 1979, 3-4, 15). Therefore, before continuing with the use of these plants by different cultural groups in Suriname, the calabashes and bottle gourds will be dealt with from their biological perspective.

2.2 Bottle gourds

The *Lagenaria siceraria* (Molina, Standley), synonymous: the common bottle gourd *L. vulgaris* (Seringe), and the white-flowered *L. leucantha* (Rusby), is a creeping vine of the Cucurbitaceae family to which pumpkins and squashes belong (fig 1) (Heiser 1979, 72; Price 1982, 69-70, 80; Robinson and Decker-Walters 1997, 88). *Lagenaria* is derived from the Latin *lagena*, meaning bottle, whereas *siceraria* comes from *sicera*, or drinking vessel (Heiser 1979, 72; Stahel 1962, 205). This plant is named bottle gourd, gourd, calabash, and white-flowered gourd (Robinson and Decker-Walters 1997, 88). In this thesis the plant is referred to using its scientific name *L. siceraria*, and as bottle gourd or gourd.

The bottle gourd is native to tropical Africa and the genus *Lagenaria* contains six species, of which five are wild and native to Africa: *L. abyssinia* (Hook. f.) C. Jeffrey, *L. breviflora* (Benth.) Roberty, *L. guineensis* (G. Don) C. Jeffrey, *L. rufa* (Gilg) C. Jeffrey, and *L. sphaerica* (Sond.) Naud (Robinson and Decker-Walters 1997, 88). The sixth member of the family, *L. lagenaria*, was present as a wild population and found in Zimbabwe, Africa, which confirms that the bottle gourd is native to Africa. Besides, distinct landraces and numerous cultivars exist. Those of African and New World origin are known as *L. siceraria* ssp. *siceraria*, and the Asian cultivars and landraces are known as *L. siceraria* ssp. *asiatica* (Kobiokova) Heiser (Heiser 1973, 127; Robinson and Decker-Walters 1997, 88-90).

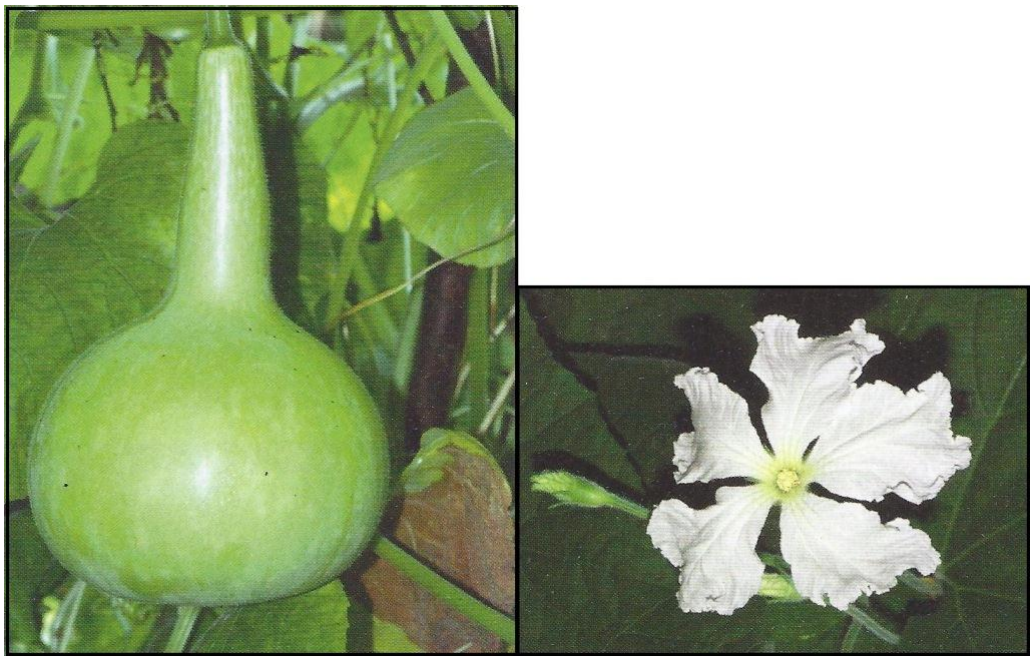


Figure 1. The *Lagenaria siceraria* on the vine (left), and the white-flower of the *L. siceraria* (right) (Andel and Ruysschaert 2011, 182).

Nowadays widely dispersed over the world, it was first thought that the bottle gourd came to the New World due to ocean currents, as fruits would have still viable seeds (Dimbleby 1978, 82; Piperno and Pearsall 1998, 140; Pearsall 2008, 108), but it is known that the wild bottle gourds have a less durable exocarp (the outer layer of the fruit) than the ones of the domesticated *L. lagenaria* as a result of cultivation (Decker-Walters *et al*. 2004, 503). The shell is thick and porous which assures a distribution by travelling humans, or at least of domesticated bottle gourds taken by ocean currents as these have thicker exocarps (Decker-Walters *et al*. 2004, 507; Erickson *et al*. 2005, 18315-18317, 18319; Robinson and Decker-Walters 1997, 90). The importance of the distribution of the bottle gourd throughout the world, and in which time span this happened, does give more information about the use and domestication of this plant (Doran *et al*. 1990, 357). Recent research disputes the division between *L. siceraria* ssp. *siceraria* and *L. siceraria* ssp. *asiatica* (Erickson *et al*. 2005). The bottle gourd is native to tropical Africa, whereas the oldest archaeological remains are found in the New World and show that this plant was already used 7,000-10,000 years ago in Peru, Mexico and Florida (USA). The remains found in Africa are dated 4,000 years ago only, whereas archaeological remains in Asia are dated around 8,000-9,000 years ago and in Polynesia 1,000 years ago (Erickson *et al*. 2005, 18139; Robinson and Decker-Walters 1997, 89-90). The DNA from several New World archaeological remains of bottle gourds showed that their DNA was more similar to the modern Asian reference group, and moreover, the seed morphology was more

similar to the Asian bottle gourd. So, distribution is likely to have happened from Asia, across the Pacific Ocean to the New World (Erickson *et al*. 2005, 18318-18319). This has implications for the division between *L. siceraria* ssp. *siceraria* and *L. siceraria* ssp. *asiatica* as the archaeobotanical bottle gourd remains from the New World are closer related to *L. siceraria* ssp. *asiatica*, which might suggest that only the African cultivars and landraces can be ascribed as *L. siceraria* ssp. *siceraria*, whereas Asian and now also New World cultivars and landraces can be ascribed as *L. siceraria* ssp. *asiatica*. Investigations on the thickness of the rind assure that the New World archaeological found bottle gourds are domesticates, suggesting the introduction of a domesticated bottle gourd into the New World. Besides, it also suggests that the bottle gourd was domesticated twice: an early domestication in Asia, and a later domestication in Africa (Erickson *et al*. 2005, 18315-18317, 18319; Lema 2011, 115-116; Robinson and Decker-Walters 1997, 90).

The bottle gourd prefers sunny, semi-dry and low elevation areas. However, it can also grow in wetter tropical areas as long as the soil is well drained and temperature is 18 to 30 degrees centigrade. Due to human selection a wide range of variety exists in the shape of the fruit, varying from broad and rounded to flattened, globular, bottle- or club-shaped, to crook-necked or coiled, curved or cylindrical (fig 2). The fruit shape can be manipulated at the earliest stages of growth with twines or moulds. The size of the fruit can reach over 300 cm in diameter, but it may well get no bigger than 5 cm (Price 1982, 69-70; Robinson and Decker-Walters 1997, 89, 93). The shell is free from irregularities, like lobes or warts and can have a brown to bordeaux red colour (Lema 2011, 116). The morphology of the vine like the stem, the shape of the leaf, flowers, fruits, seeds, and growing period makes distinction between landraces and cultivars possible. Because of the many different cultivars (Robinson and Decker-Walters 1997, 88-90), there are many variations in fruit size and shape. There are two bottle gourd variants cultivated in Suriname: a small bottle shaped one known as *papagodo*, and a large round bottle gourd which is known as *kágo gólu* (Andel and Ruysschaert 2011, 182).

The method of preparing the fruit for use entails immersing it into water to rot out the insides, after which a thin outer membrane can be rubbed off. However, this thin outer membrane is only mentioned by Price (1982, 70). The flesh or pulp is known to taste bitter and to remove this bitterness a long-period water immersion (for months) is used in Africa after which the bottle gourd is used as water bottle, whereas in the Pacific the bottle gourd is boiled to remove the bitterness (Heiser 1979, 76-77). The bitterness is caused by the compound cucurbitacins, which is thought to be strongly poisonous and which is present in some cultivars of the *Lagenaria siceraria* (Teppner 2004, 257-258). Only the non-bitter variants are eaten (Heiser 1979, 76). This would explain the need to

immerse or boil the fruit before using it, because the fruits are generally used as containers for water and beverages, and to store food or other items. However, Price (1982) does not mention that the bottle gourd used by the Maroons is bitter, or that the rotting-out is done for this reason. Furthermore, bottle gourds are used as plates, cups, spoons, snuff boxes, pipes, penis sheaths, masks, birdhouses, or to keep crickets. Besides, the bottle gourd is also eaten if it is not a bitter variant, and parts of the plant are used for medicinal purposes. Also fish-floats are made of bottle gourds, as well as a whole variety of musical instruments. In general, the bottle gourds are decorated in all lands were they are used (Decker-Walters 2004, 501; Dimbleby 1978, 84; Heiser 1979; Robinson and Decker-Walters 1997, 90-91; Stahel 1962, 205).

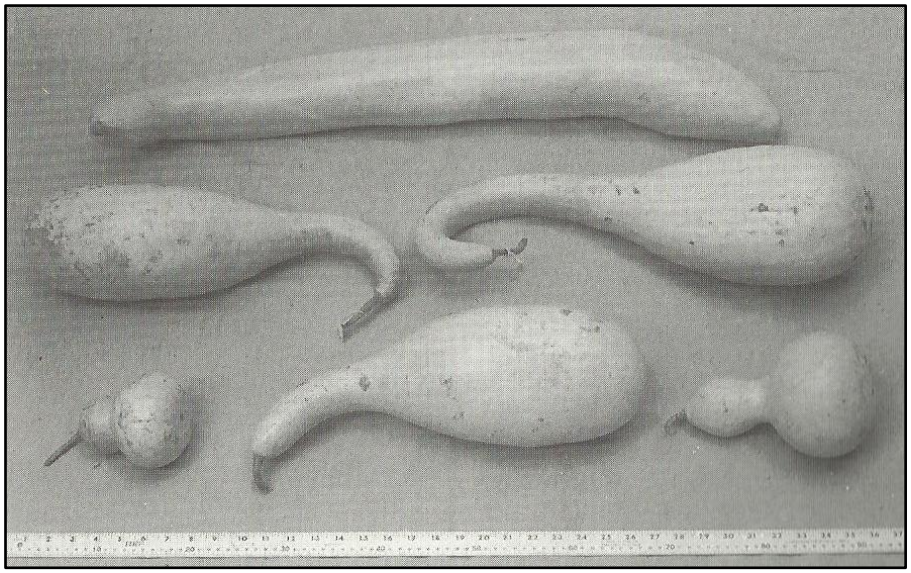


Figure 2. Variation in the shape of the bottle gourd, *Lagenaria siceraria* (Robinson and Decker-Walters 1997, 89).

2.3 Calabashes

Calabashes are the fruits of the *Crescentia cujete* Linnaeus, named after the thirteenth-century Italian writer on horticulture and gardening Pietro de Crescenzi, combined with the Brazilian common name *cuieira* (Heiser 1979, 17). It is a small tree of 4-12 m in height (fig 3), and is a member of the Bignoniaceae family to which various tropical flowering trees belong (Bass 2004, 68-69; Heiser 1979, 7-8; Price 1982, 69). The calabash tree and/or its fruits are referred to in the literature under different names such as calabash, calabash tree, gourd tree and gourd, with many common names in Latin American indigenous languages (table 1): *jícaro*, *güiro*, *totumo*, *poporo* and *cuieira* (Arango-Ulloa *et al*. 2009, 544; Bass 2004, 67; Heiser 1979, 17). Throughout this thesis the term calabash is solely used for the *Crescentia cujete* tree and its fruits.

Six species exist within the genus *Crescentia*: *C. alata* (Humboldt, Bonpland & Kunth), *C. amazonica* (Ducke), *C. cujete* (Linnaeus), *C. linearifolia* (Miers), *C. mirabilis* (Eckman ex Urban), and *C. portoricensis* (Britton). The species are interfertile, which means that they are capable of interbreeding, and their differences are defined by the vegetative characteristics, e.g. leaf shape, and the size of the fruit. They are native to tropical America ranging from Mexico and the West Indies to Amazonian Brazil (Gentry 1977, 55; 1980, 83; 1982, 141; 2009, 131), and are adaptive to different ecological regions. It is thought that the distribution of the *C. alata* and *cujete* is influenced by being food for cattle, as cattle ranchers in Honduras collect the fruits of calabash trees as food for their livestock during the dry season, thus influencing agroforestry (Bass 2004, 75-76). The specific distribution, cultivation areas, shape of the fruits and local names for the six different *Crescentia* species can be found in table 1 (adapted from Gentry 1980).

The *C. cujete* is similar to the *C. alata*, which is regarded as a non-domesticate with smaller fruits (7-15 cm in diameter) and trifoliate leaves, whereas *C. cujete* is domesticated or semi-domesticated with larger fruits (15-25 cm in diameter) and oblongate leaves. The *C. cujete* is regarded as less common and is restricted to domestic settings (Janzen 1983 in Bass 2004, 68-70). Various hybrids between *C. alata* and *C. cujete* are encountered in nature (Gentry 1980, 87). Research points out that no relation exists between the geographical provenance, fruit morphology and genetic diversity under the *C. cujete*, *C. alata* and *C. amazonica*. It is confirmed that *C. amazonica* is a separate species whereas *C. alata* is considered as indistinct from *C. cujete*. This latter observation was based on comparison of a single sample of the *C. alata* (Arango-Ulloa *et al*. 2009, 543).

As mentioned before different *Crescentia* species exist. However, the variety in size and shape of the fruits is attributed to the variability in cultivated species, so-called cultivars. A cultivar is a species variation that has been produced through cultivation by selective breeding (Soanes and Stevenson 2008, 349). It is known that different cultivars of the *C. cujete* exist in Suriname (personal communication van Andel 2010), which have different sizes and shapes, and are used for specific purposes. In 1756 Rolander (2008, 1519) describes in Suriname the *C. cujete* as well as the *C. stricta* (Browne). The *C. stricta* is described as a bare-trunked tree, which is compact and high, with oval leaves. The fruits are stalkless, globular and smaller than those of the *C. cujete* (Rolander 2008, 1519). It is probable that this *C. stricta* is a cultivar, as only the *C. cujete* is considered to be found in Suriname. The calabash tree was grown along the walkways through the plantations (Kappler 1854, 53; Rolander 2008, 1308). Both the Maroons (Andel and Ruysschaert 2011, 120; Price 1993, 87; Price and Price 1980, 150), as well as the

Amerindians recognise several cultivars, which will be discussed in paragraph 4.4 and 5.3.1.

Figure 3. The *Crescentia cujete* tree with fruits. Detail of fruit (top right), and flower (bottom right) (http://www.arbolesornamentales.es/Crescentiacujete.htm).

Only the *C. cujete* is found in Suriname (Gentry 1980, 93; Sandwith 1938, 83; Stahel 1962, 171), and as such this species will be discussed in more detail. The *C. cujete* grows in three ecological zones: temperate sub-humid, tropical humid, and tropical sub-humid and adapts to a variety of soils, and is resistant to fire and drought (Bass 2004, 70-71). Therefore, it is nowadays widely dispersed and cultivated, and can be found in gardens of Mexico, Central and South-America, and also those of Africa and Asia (Arango-Ulloa *et al*. 2009, 543; Gentry 1977, 56; 1980, 91-93; 1982, 145; 2009, 135; Heiser 1979, 16; Sandwith 1938, 83). The tree has flowers that are short-stalked yellowish or pale green with streaks of purple, and are probably pollinated by bats (Janzen 1983 in Bass 2004, 69; Heiser 1979, 15). Its fruits are globular, but as recent research points out, different shapes, like oval, and oblong are commonly found (fig 4) (Arango-Ulloa *et al*. 2009). Also the sizes of the fruits vary (Arango-Ulloa *et al*. 2009, 543-544, 546; Heiser 1979, 15; Sandwith 1938, 83). With the maximum diameter of the fruit being 25 cm, and the minimum diameter around 5 cm, the size of the fruit can vary a great deal (Arango-Ulloa *et al*. 2009, 546). The fruits of all the *Crescentia* are valued for

their shell, which is thin, hard, woody and lepidote-punctated (scaly spots and minute depressions) (Gentry 1980, 91) and therefore excellent as material for different purposes.

The process of making the fruit ready for use starts by removing the inner pulp which contains the small seeds. Then, the empty shell is boiled in water, after which the remains of the inner pulp can be removed easier (Price 1982, 69-70). However, this method of cleaning depends on the purpose of the shell as paraphernalia will be explained in Chapter 4 and 5. The fruit of the calabash tree has many purposes used as a cup, spoon, container, or as a disk for spindles, as well as a bailer for canoes and musical instruments like the rattle or scraper. The pulp has medicinal purposes, and is on some occasions eaten. The flowers, the seeds, and the leaves all have medicinal purposes or are consumed as a beverage (Bass 2004, 70; Gentry 1980, 93-94; 2009, 135; Heiser 1979, 17-22; Sandwith 1938, 83; Stahel 1962, 171), and besides are used as cattle forage (Bass 2004, 75). The tree itself is used for shade and to grow orchids on. Processed its wood is manipulated, which, while being fresh can easily be handcrafted and when older, the hard wood is used as firewood or for construction (Bass 2004, 70; Heiser 1979, 21). The fruits of other species of the *Crescentia*, like the *C. alata*, are also used as cups, spoons or rattles (Gentry 1980, 87).

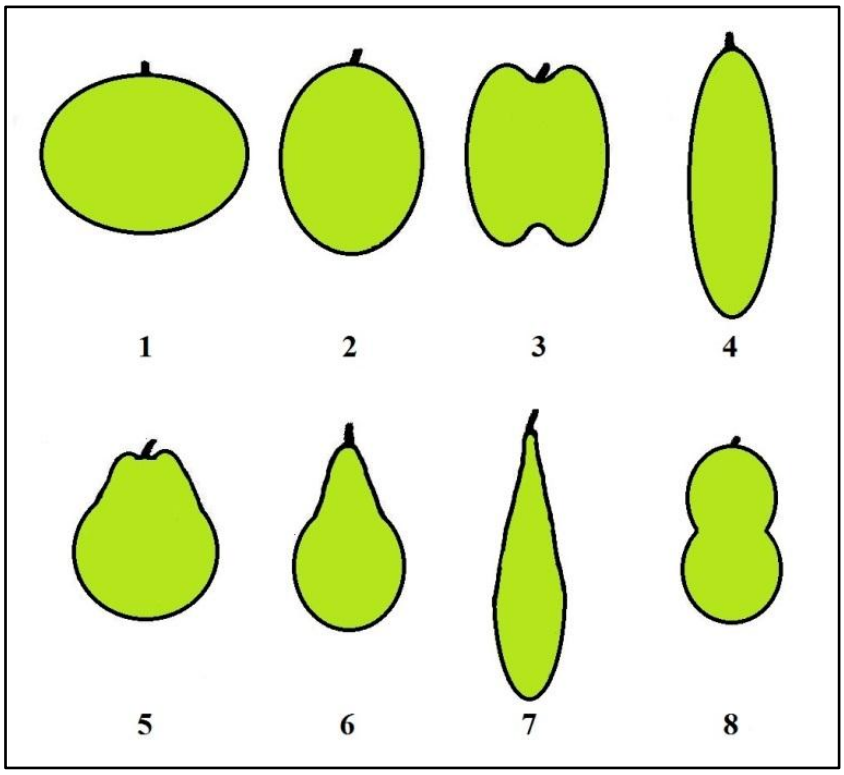


Figure 4. Example of the different possible fruit shapes of the *Crescentia cujete* in Colombia with 1 - flattened, 2 - oblong, 3 - cuneate, 4 - elongated, 5 - globular, 6 - rounded-drop-shaped, 7 - oblong-drop-shaped, 8 - kidney-shaped (after Arango-Ulloa *et al.* 2009, 548).

2.4 The collections dataset

The collection of gourds and calabashes of Suriname in the National Museum of Ethnology in Leiden consisting of 382 objects and a smaller collection of 41 objects from the Suriname National Museum Paramaribo were studied for this thesis. There was no distinction made in studying calabash or gourd objects or by cultural group. All objects from Suriname were included.[1]

According to Heiser there are several methods to distinguish the calabash (*C. cujete*) from the bottle gourd (*L. siceraria*) when already harvested as these two different species can have the same size, shape and are used in similar ways (Heiser 1979, 24):

1. Microscopic examination of a thin section of the rind, which shows the differences in cellular structure (Heiser 1979, 24). However, this method is not suitable for museum artefacts as in general it damages, though mildly, the objects.
2. Measurement of the cross section of the rind. This is not completely reliable. The calabash is three millimetres or less thick, while the rind of the bottle gourd is usually thicker, especially the domesticated one (Heiser 1979, 24-25), therefore this method is not used.
3. The inside of the calabash has a smoother finish than the inside of the bottle gourd (Heiser 1979, 25).
4. The bottle gourd is generally larger than the calabash (over 30 centimetres, although smaller sizes exist) (Heiser 1979, 25).
5. These objects are often decorated, however, decorated objects with a black glossy finish, are mostly calabashes (Heiser 1979, 25).

Studying the collections gave me the opportunity to make observations, independent of the Heiser's guidelines. Indeed the differences in rind thickness, the smoother finish of the interior among calabashes in contradiction to gourds, were observed. I was aware of the fact that bottle gourds and calabashes could have the same size or shape. However, I also observed characteristics which were not mentioned by Heiser:

6. The outside of the calabash shell is lepidote-punctated as mentioned by Gentry (1980, 91). This was not observed among the bottle gourds. However, if the calabash shell was decorated with paint on the outside, this punctuation can no longer be seen.
7. Furthermore, there is a difference in shape of the part where the fruit was attached to the tree/vine. The bottle gourd has a smoother surface where the stem

[1] There were 12 objects which were not available due to being part of the permanent collection and re-building of the National Museum of Ethnology, Leiden.

starts, whereas the one of the calabash is characterised by a round outward thickening.

Overall, by itself a single method is not reliable to make a distinction. However, while taking them all together into account makes a more reliable determination possible. Fortunately, as both kinds of fruits were present in the collection it was very easy to observe and learn to identify the differences. It is important to distinguish these kinds of fruits, as it has consequences for the way of processing the results. Furthermore, in some cultures there is a ceremonial distinction made between these kinds of fruits (Heiser 1979, 25), which is important to take into account when doing research.

2.5 Summary

The bottle gourd (*Lagenaria siceraria*) and the calabash (*Crescentia cujete*) are two different plant species of which the first one is a creeping vine whereas the latter one is a flowering tree. They originate from two different areas: the bottle gourd is native to Africa, whereas the calabash originates from tropical America. Both grow in Suriname, as well as several cultivars of each species.

Based on the archaeological record the *L. siceraria* makes an early appearance in the Americas and was probably globally dispersed by humans rather than by ocean currents. In its hollowed out form the fruit was perfectly suitable as a container for liquids, which probably led to early domestication in Asia and later on in Africa.

In contrast to the bottle gourd, the calabash has a thin wooden shell, which is easily treated by scraping out the inner pulp, after which the empty shell is boiled. Although both fruits come in many sizes and shapes and are used for a variety of purposes, the two species are distinguished from each other on the basis of their (1) cellular structure, (2) rind thickness, (3) smoother finish inside calabash, (4) generally larger fruit size of bottle gourds, (5) black glossy finish of decorated calabashes, (6) lepidote-punctuation of the calabash shell, and (7) the difference in the shape of the part where the fruit was attached to the tree/vine.

Species	Distribution	Cultivation	Shape of fruits	Local names
Crescentia alata **(Humboldt, Bonpland & Kunth)**	Along Pacific Coast from Mexico to Costa Rica.	Cuba, Philippines, Guam, Cambodia, India, Java, and elsewhere.	Calabash, more or less spherical, 7-10 cm in diameter.	Guatemala: morro, jicaro. Honduras: jicaro, morro, guacal, morrito. Mexico: Sinaloa: tecomate, ayale, tecomata. Jalisco: sirian. Michoacan/Guerrero: cirian, sirian, syrial, tecomate. Oaxaca: jicara, jicarita, morro. Nicaragua: jicaro, jicarito. El Salvador: morro, morrito.
Crescentia amazonica **(Ducke)**	Along upper and middle Amazon and Orinoco River and the major tributaries of *varzeas* of these rivers.	/	Calabash, sub-spherical to oblong-ellipsoid, 4-4.5 cm in diameter, and 5.5-7 cm long.	Brazil: cuia pequena do igapo, cuia maraca, cuiupi, cuia pequena. Venezuela: tapara montanera, totumo, taparo de agua, tapara.
Crescentia cujete **(Linnaeus)**	Northern Central America and Mexico. Wild-growing trees elsewhere are probably descendants from cultivated trees.	Venezuela, Trinidad, Guyana, Suriname, French Guiana, Ecuador, Peru, Brazil, Bolivia, Paraguay, Bermuda, Indonesia, Philippines, Society Islands, Ghana, Nigeria, Liberia, India, Vietnam, and elsewhere.	Calabash, spherical to ovoid-elliptic 13-20 cm in diameter to 30 cm long.	English (Jamaica, Bahamas, Grand Cayman, Bermuda, Belize): calabash, wild calabash, tree calabash. French (St. Barthelemey, Martinique, Guyana Francaise): calebassier. Dutch (Curaçao, Aruba): kalabash, calbas, calbas rondo. Dominica: callabasse longue, callebasse coricon, calebasse boite. Cuba: güira, güira del mento, calabasa. Puerto Rico: higuera, higuero. Mexico: west coast (Sinoloa to Guerrero): tecomate, ayale, cerial, cirian mazo. Yacatan (Maya): hoco, luch, huaz. Eastern and southern Mexico to Honduras: jicaro, jicaro, morro. Honduras (Wisperini): Kabami. Coast Rica: jicaro. Panama: totumo. Colombia: tutomo, tutomo cimarron. Venezuele: totuma, tapara. Ecuador: mate, pilche, pilchimate. Peru: coast: totuma, totumo. Amazonia: tsapa, huingo, pati, sacha huingo, buhango. Brazil: cueira, cuia. Bolivia: porobamba.
Crescentia linearifolia **(Miers)**	Dry coastal forests below 100 m from Hispaniola, Puerto Rico till the northernmost Lesser Antilles; and northern Belize.	/	Calabash, globose to ellipsoid, 3-5 cm long, 3-4 cm wide.	Dominican Republic: higüerita. Haiti: calabasse maron. Puerto Rico: higüerita, higüerito.
Crescentia mirabilis **(Ekman ex Urban)**	Coastal marshes of north-eastern Cuba.	/	Unknown	/
Crescentia portoricensis **(Britton)**	Rare in the foothills between 300 and 800 m of south-western Puerto Rico.	/	Calabash, oblong-ellipsoid, terete, acute at apex, distinctly angulate at base 7-10 cm, 3-3.5 cm in diameter.	/

Table 1. The different *Crescentia* species, with their distribution and cultivation area, the fruit shape and local name (after Gentry 1980, 82-96).

Chapter 3 Suriname from prehistory till history

3.1 Introduction

Only a small part of the material culture of past societies is found in the archaeological record. It can be assumed that more than 90 percent of the material culture of past societies was made of perishable materials (Drooker 2001, 6) like calabashes and bottle gourds. Contemporary societies still use a wide variety of perishable materials like wood, plant fibers, leather, feathers and many other organic materials (Gillin 1948, 827-857). However, macrobotanical remains are only preserved when they are (1) waterlogged and permanently wet since deposition; (2) desiccated in an absolute dry environment; (3) permafrost sites; (4) charring; (5) miniralisation of the plant remains; or due to (6) volcanic eruption (Logan *et al*. 2001, 139-141; Renfrew and Bahn 2004, 63, 67-74, 276). In the specific case of Suriname with its humid tropical climate the chance of survival of perishable materials is quite small (Boomert 1977, 30; Renfrew and Bahn 2004, 63).

One of the main material categories found in archaeology is pottery. It is assumed that the use of calabashes and gourds as containers provided the first models upon which early pottery was based. This is apparent in both the shape and decoration of some of the earliest pottery in the Americas which resembles calabashes and gourds (Oliver 2008, 207; Rodríguez Ramos *et al.* 2008, 58-59). Moreover, despite the fact that calabashes and gourds are generally not recovered archaeologically, it can be assumed that they were used alongside pottery vessels. The calabash or gourd artefacts from Manantial de la Aleta in the Parque Nacional del Este in the Dominican Republic were found in a wet context of a flooded cavern which was used by the Taíno (the inhabitants of Hispaniola) around AD 1035 to 1420, and are interpreted as offerings to the underworld. Several so-called “gourd vessels” (fig 5) have been found of which two are collected and identified as *Crescentia cujete* (fig 7). Two are decorated with incisions in Chican Ostionoid (Chicoid) subseries style (fig 6), the same as used on pottery, and it is stated that these designs are even more carefully executed than those found on the pottery from this site (Conrad *et al*. 2001, 1-2, 12). It is not unthinkable that pottery had a similar function to bottle gourds and calabashes and that these two different media were used next to each other (Rodríguez Ramos *et al.* 2008, 58-59).

This chapter gives a culture-historical overview of the archaeology of Suriname which is important for understanding the present-day make-up of Suriname society. For example, contemporary Kari’na pottery probably evolved out of the archaeological known Koriabo culture based on pottery shape, decoration techniques and temper material (Boomert 1986, 47, 49; Vredenbregt 2002, 36). Descriptions of the ceramics and

the material culture of archaeological cultures may offer information on the potential use and decoration of of perishable calabashes and gourds in these societies. The archaeology of Suriname will be followed by an overview of the history of Suriname as the events that took place influenced the societies of today.

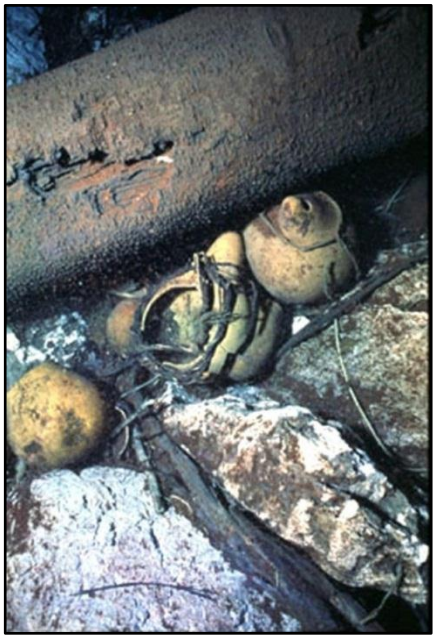


Figure 5. The gourd vessels in Manantial de la Aleta (Conrad *et al.* 2001, 12).

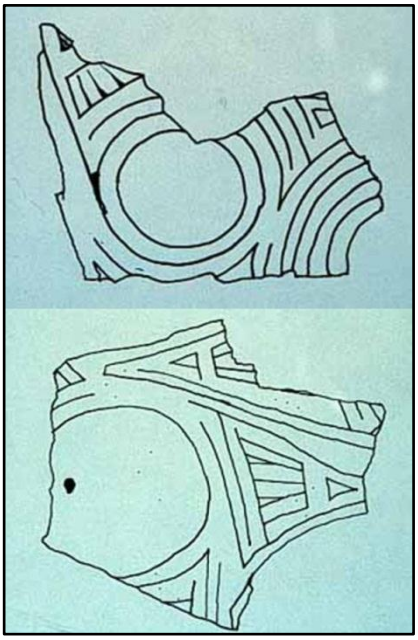
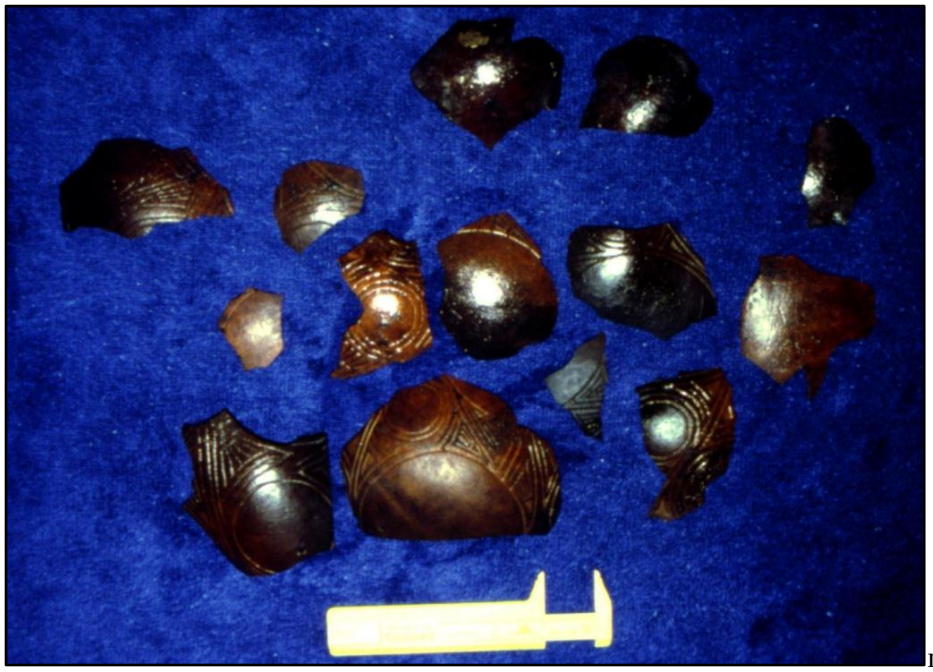
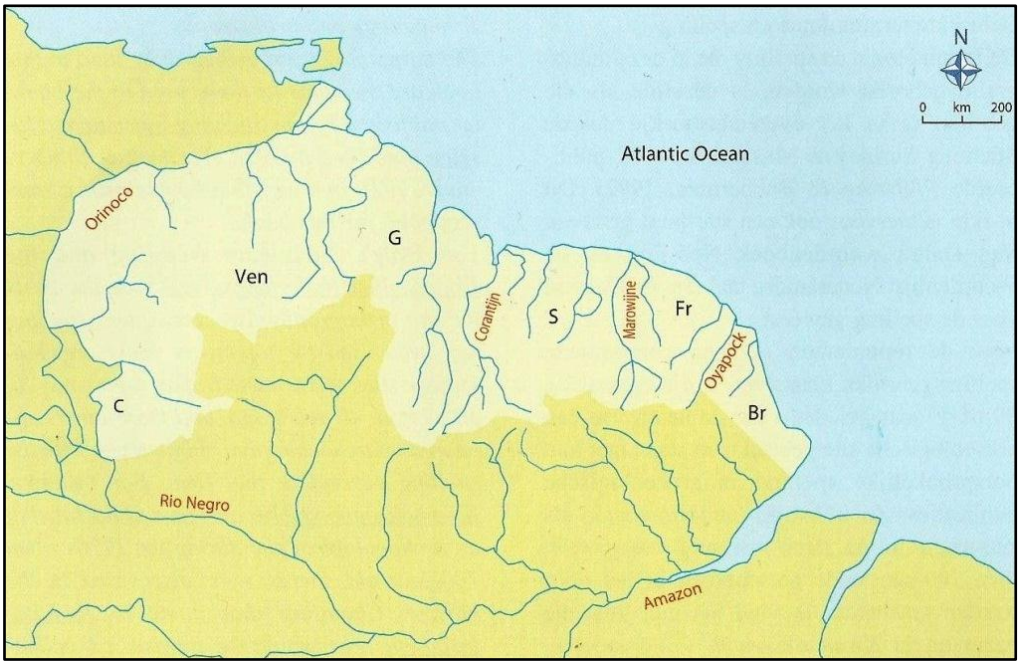


Figure 6. Two examples of engraved decoration on the calabash objects (Conrad *et al.* 2001, 13).



modelling

Figure 7. The engraved calabash fragments from Manantial de la Aleta, with the largest fragment 9-10 cm (Conrad *et al.* 2001, 13).



Map 1. The Guianas and the division in recent country states. With Ven = Venezuela, G = Guyana, S = Suriname, Fr = French Guiana, Br = Brazil, and C = Casiquiare Canal (Versteeg 2003, 22).

3.2 Suriname in Guiana

Suriname, formerly known as Dutch Guiana, is situated in northern South America between Guyana and French Guiana, and Brazil in the South. The northern border of Suriname is formed by the Atlantic Ocean, whereas the western border makes up the Corantijn River, the eastern border the Marowijne River and the southern border is formed by the Tumac-Humac Mountains. Suriname is part of the Guianas of which Brazil, French Guiana, Suriname, Guyana, and Venezuela are part (map 1). These countries form a cultural island geographically bordered by the Amazon and Orinoco rivers and the Atlantic Ocean.

Four landscapes can be distinguished in Suriname: the Precambrian Shield, the Cover Landscape, the Old Coastal Plain and the Young Coastal Plain. Northern South America is part of the geological formation of the Guiana shield, a rock formation formed in the Precambrian which is circa 1900 million years old and consists of metamorphic rocks, which disappear under the younger northern sediments. The Cover Landscape (50-10 m above sea-level) is part of the Coesewijne Formation and formed during the Pliocene which consists of fluvial bleached sands and lowland loams. The Old Coastal Plain (2-7 m above sea level) consists of the sands and marine clay of the Coropina Formation formed during the Pleistoceen, whereas the Young Coastal Plain (0-3 m above sea-level) consists of mud-flats and sandy or shelly cheniers formed during the Holocene and are part of the Demerara Formation (Versteeg 2003, 26-31).

The Guianas have a humid tropical climate with high average temperatures, the average temperature in Suriname is 27 degrees, with an average humidity of 82 percent, and the land is covered by tropical forest. The annual rain fall in Suriname varies between 1500 mm along the coast and 3000 mm in the hinterland. The year is divided into seasons by the amount of rain; (1) small rain season (December till February), (2) small dry season (February till April), (3) large rain season (April till mid August), (4) large dry season (mid August till December), moreover the seasons vary per year (Scherpenzeel 1977, 338-346). As a result of the tropical climate objects of perishable material are almost never found in the archaeological record (Boomert 1977, 30).

The annual rainfall results in a dense network of rivers, which are streaming from south to north (whereas the Wayombo River is an exception connecting the Coppename River with the Nickerie River), with the Casiquiara Canal being the most important waterway connecting the Orinoco with the Rio Negro. These waterways served in pre-Columbian times as well as today as transportation routes for the cultural dispersion of the movement of ideas and people. Moreover, this network of rivers is still used for transportation as land routes are quickly overgrown by vegetation and need extensive maintenance. So, transportation over water is the most common way to travel although there are risks like rapids, waterfalls, as well as currents and high waves (Versteeg 2003, 24-25).

3.3 Paleo Indians as the first inhabitants of Suriname

The first inhabitants of the American continent came from Asia during a warmer period of the last Ice Age, around ca. 40,000 years ago (although this date is still under dispute). It is around this time that the area which is nowadays known as the Beringia Sea was dry land, and served as a land bridge between Asia and America which could be crossed by foot (Boomert 1977, 506; 2000, 47; Versteeg and Bubberman 1992, 8). However, instead of using the Beringia land bridge it is possible that these peoples used boats and hopped from island to island after which they reached the mainland of America. The descendants of these first migrants discovered eventually the South American mainland around 35,000 BP and entered the southern part of the continent via Panama. For their subsistence these hunter-gatherers were focused on Pleistocene animals, and next to bone and wooden tools used stone artefacts, processed through a simple unifacial stone-chipping technology, which is called the Flake Tradition. However, the Ice Age came to an end due to climate change; the temperature rose and consequently the sea level rose. In this phase the large Pleistocene animals became extinct, and the Paleo Indians had to adapt their subsistence

strategy on smaller sized animals in order to survive (Boomert 1975, 27; 1977, 506; 2000, 47, 51; Versteeg 2003, 54; Versteeg and Bubberman 1992, 16).

The oldest known archaeological remains of Suriname have been found in the Sipaliwini Savanna. These savannas stretch from the coastal area of West Venezuela to Southern Guyana, Southern Suriname, and Southern French Guiana (Boomert 1977, 506; 1980a, 94; Rostain 2008, 279; Versteeg 2003, 53-54; Versteeg and Bubberman 1992, 16). The early Sipaliwini sites are located on the top of low hills, and can be divided in workshops or campsites depending on the stone artefact assemblage (Boomert 1977, 506; 1980a, 97-98; 2000, 50; Rostain 2008, 282; Versteeg 2003, 54-55; Versteeg and Bubberman 1992, 16). The early Sipaliwini complex can be assigned to the Canaiman subseries of the Joboid series and is widespread throughout the Guianas, whereas the later phase is restricted to Suriname and coastal Guyana (Boomert 1980a; 99-101; 2000, 50). The Canaiman complex can be dated around 11,000 BP (Boomert 2000, 51), but no absolute dates are known.

3.4 Meso Indians in neighbouring areas

Following the hunter-gatherers of the Sipaliwini Savanna the archaeological record of Suriname is empty from 5,000 to 2,000 BC (Rostain 2008, 282; Versteeg 2003, 63; Versteeg and Bubberman 1992, 20). However, in Guyana the first permanent villages were built around 6,000 BC to 1,400 BC, and are known as the Alaka complex. This complex can be assigned to the Ortoiroid series which is an Archaic cultural tradition (Boomert 2000, 68; Versteeg and Bubberman 1992, 19). The inhabitants of these villages collected molluscs and fish, hunted animals and collected wild plants. They were located at the Guyana coast where brackish water and freshwater marshes are in close vicinity. Shellfish gathering is a highly efficient subsistence strategy with low-risk, and high-return. As a result of this subsistence economy the villages were located on the remains of the mollusc fauna and fish, or so-called ‘shell middens’ or ‘kitchen middens’ (Boomert 1977, 506; 2000, 53, 69-70; Rostain 2008, 283; Versteeg 2003, 61-62; Versteeg and Bubberman 1992, 19).

The Alaka complex can be divided into Early and Late Alaka (Boomert 2000, 70, 72, 81), based on the undecorated rounded based pottery which can be found during the Late Alaka complex, whereas the Early Alaka was preceramic (Boomert 2000, 70, 72, 80). It is probable that bottle gourds and calabashes stood as example for this rounded based pottery. The entire complex is characterized by crude, unmodified and multifunctional stone artefacts (Boomert 2000, 80; Versteeg and Bubberman 1992, 19). Rostain argues that we will never find archaeological remains in Suriname from the same

kind of peoples, as there were no large colonies of shellfish in that period in front of the coast, due to the muddy banks brought by the Amazon (Rostain 2008, 283). This does not mean that Suriname was uninhabited.

3.5 The Neo Indian period and its characteristics

Around 4,000 BC there was a shift from hunting-gathering to agriculture supplemented with hunting and fishing: the South American Tropical Forest Culture developed. This change in subsistence strategy had influence on economy, culture and material expressions (Boomert 1975, 27; 1977, 507-508; Bubberman 1977, 515; Versteeg and Bubberman 1992, 21), with the most important developments being:

(1) A substantial part of the subsistence of the Neo Indians was obtained by the cultivation of plants. Cassava (*Manihot utilissima*) is the most important cultivated plant among the contemporary Amerindians. Without processing, this tuber is poisonous, but it can be kept for a long time in the ground without withering. Cassava is cultivated on a piece of land that is mostly cleared from trees, shrubs and plants while the remains are burned (slash-and-burn system). The ash makes the ground fertile and the piece of land is used for 3 years, after which it is abandoned for 15 years, before reuse (Bubberman 1977, 515-516; Versteeg 2003, 65, 67), so called shifting cultivation (Bubberman 1977, 516; Versteeg and Bubberman 1992, 21).

(2) Processing cassava needs special tools, like a grater, a press (*matapi*) and a griddle. The grater is made of a wooden plate with small pieces of quartz. The press is woven, whereas the griddle is made of ceramics. Pottery was needed to store end products, like cassava beer (*kasiri*). It is not unthinkable that calabashes and gourds were used for this same purpose before the introduction of pottery or even used next to each other (Rodríguez Ramos *et al.* 2008, 58-59). This can still be observed among contemporary Amerindians (Chapter 5). Cassava bread another end product, can be stored for a long time in the tropics. Different kinds of techniques were incorporated to accompany the cassava processing: wood-working, stone-flaking, basketry, and pottery firing (Bubberman 1977, 515; Versteeg 2003, 67, 69; Versteeg and Bubberman 1992, 21). However, nowadays the tools are made out of different materials as they are replaced by new materials, like graters and griddles out of metal and plastic containers (Versteeg 2003, 69).

(3) Due to the influence of agriculture, living conditions changed and villages became more permanent with more complex housing. Several families lived together in a *maloca*, a house for an extended family (Versteeg 2003, 70-71; Versteeg and Bubberman 1992, 21).

(4) Canoes were used to travel the rivers, and were made of hollowed out tree-trunks. The sides of the canoe were bent to the outside with the help of fire inside and water outside. Small boards are used as seats and assure the position of the sides. Resin was used to fill small gaps. The way in which this transportation device is built assured stability and good navigation on rivers and along the coast (Versteeg 2003, 71-72; Versteeg and Bubberman 1992, 21). Wooden canoes, or *korjaal*, are still used to travel the rivers.
(5) Social relationships changed. While women worked together on the processing of cassava and other cultivated plants, the men worked on housing and hunted together. This kind of division ensured the organisation in an extended family (Versteeg 2003, 72-74; Versteeg and Bubberman 1992, 21-22).
(6) Concepts of the spiritual world were highly connected with the daily life, and were expressed in the material culture. Shamanism was part of the daily lives of these peoples. The shaman managed the spiritual world, as a mediator between the world of the living and the supernatural world. As today he used hallucinogenic substances in order to connect with the spiritual world (Versteeg 2003, 74). Nowadays, shamanism is still part of the daily life of the Amerindians.

3.5.1 The Saladoid Tradition

Around the third millennium BC peoples migrated via the Rio Negro and the Casiquiare Channel to the Orinoco delta (Boomert 1977, 508; Versteeg and Bubberman 1992, 23). The Tropical Forest Culture and its changes influenced the subsistence economy which created food surpluses and led to a population growth. As a result peoples migrated in search of fertile land, which can be found in Suriname along rivers and coasts consisting of young Holocene deposits (Boomert 1975, 30; 1977, 507; Bubberman 1977, 515-516). These peoples made a distinctive kind of pottery which is tempered with fine sand, thin-walled and hard-baked. The vessels have an inverted bell-shape form, and were decorated with handles and with white-on-red paint (WOR) in geometric designs. Furthermore, these vessels were decorated with human- and animal-shaped appliqués called *adornos*. All these characteristics are typical for the Saladoid Tradition (Boomert 1977, 508; Versteeg and Bubberman 1992, 23).

3.5.1.1 Kaurikreek, the first ceramic settlement

The oldest ceramic site Kaurikreek is located in West Suriname, which is not only part of the Saladoid Tadition, but can also be considered to belong to the Tropical Forest Culture (Versteeg 2003, 85-86; Versteeg and Bubberman 1992, 26-27). The site is situated on top of a low Pleistocene hill were a thick layer of *terra preta* was found. *Terra preta* is a black layer of soil which is the result of intentionally human enrichment of the soil with

organic matter. Especially, the amount of *terra preta* on top of the hill in combination with the artefacts found indicated the former presence of a village (Versteeg 1978, 16-17; 2003, 82-85; Versteeg and Bubberman 1992, 25-26). The pottery of this site is characterised by its decoration: thin strips of clay in geometrical patterns are applied to the wall. These patterns look like basketry. This kind of decoration is not elsewhere found in the Guianas or Venezuela (Rostain 2008, 284; Versteeg 1978, 19; 2003, 82-83; Versteeg and Bubberman 1992, 25). This pottery is associated with Saladoid ceramic styles located in the Middle Orinoco, based on the handle shape (Boomert 1977, 508; Versteeg 2003, 83). The temper of Kaurikreek is locally made. The pottery is decorated with animal shaped *adornos*, like frogs, cat and bird heads. And while the pot shape is quite simple, the shards are round, indicating that the bottom of the vessels were rounded (Versteeg 1978, 18-19; 2003, 83-84; Versteeg and Bubberman 1992, 25, 59) which could suggest that the round shape of calabashes and bottle gourds served as examples. Several stone objects were found of various rock types of which some could be identified as being part of artefacts (Versteeg 1978, 19). Kaurikreek has been dated to 2,200 until 1,750 BC and 800 to 550 BC (Versteeg 1985, 658; 2003, 82, 84; Versteeg and Bubberman 1992, 25).

3.5.1.2 Wonotobo and its Martime Saladoid component

Wonotobo is an archaeological site along the Corantijn River near the Wonotobo Falls. The pottery found at this site has the same distinctive kind of Saladoid characteristics as can be found on the Caribbean islands from the same period, and is referred to as *insular phase* of the Saladoid Tradition, or Maritime Saladoid Tadition. Wonotobo is the most eastern situated site with this distinctive kind of pottery, and the only one in Suriname. It is very likely that the Saladoid peoples, known as good seafarers, reached this place with the help of canoes (Boomert 1983, 97-98, 100; Versteeg 1985, 658; 2003, 87-88,106; Versteeg and Bubberman 1992, 27-28).

The pottery is tempered with white sand and is thin walled. Characteristic for this kind of Saladoid pottery is the white-on-red painting together with the zoned-incised-crosshatched (or ZIC) incisions. Also, red or red-on-white painting has been found as well as lobes and impressions on the vessel rims. Various stone artefacts have been found (Boomert 1977, 508; 1983, 99-103; Rostain 2008, 284; Versteeg 2003: 88-90). These peoples practised the slash-and-burn method to cultivate manioc. Furthermore, they hunted and fished in order to supplement their diet (Boomert 1983, 103). Wonotobo is dated around AD 70 till 200 (Versteeg 2003, 88; Versteeg and Bubberman 1992, 28).

3.5.2 The Barrancoid tradition

Around the second millennium BC a second ceramic tradition from Amazonia reached the Middle Orinoco. This tradition is named after the sites Barrancas and Los Barrancos. Not only were the Saladoid peoples possibly forced to move to the coast of Venezuela, Trinidad and the Lesser Antilles, but they were also influenced by this Barrancoid tradition. During the *insular phase* of the Saladoid Tradition (or Maritime Saladoid Tradition) they adapted new decoration motifs like zoned-incised-crosshatched (or ZIC) incisions (Boomert 1977, 508) as was mentioned before (paragraph 3.5.1.2).

3.5.2.1 Wonotobo and its Barrancoid component

The Wonotobo settlement as mentioned under the Saladoid Tradition (paragraph 3.5.1.2) has a second component, the Barrancoid Tradition, which makes Wonotobo a multi-component site. The location at the river bank influenced the drainage of water and makes it a favourable place for settlement and agriculture (Boomert 1977, 508; Versteeg 2003, 91, 94; Versteeg and Bubberman 1992, 30-31). Late Mabaruma pottery was found in later depositions of the Wonotobo site which is attributed to the Barrancoid Tradition. The temper of the pottery is made from white sand and middle-sized particles, while the colour of the Barrancoid ceramics is more orange than red when compared with the Saladoid ceramics. Characteristic for the Barrancoid Wonotobo pottery decoration are the thickened rims with incisions, wide curved incisions with semicircular spiral shaped motifs, lugs and knobs. The *adornos* are animal shaped and are abstract or naturalistic. However, incidental human shaped *adornos* have been found (Boomert 1977, 508; 1983, 98-99; Rostain 2008, 284; Versteeg 2003, 91-94; Versteeg and Bubberman 1992, 30).

3.5.3 Raised mounds on the coast

The coastline of Suriname is naturally fertile and has a variety of different ecosystems. In the past people used this natural fertility and raised mounds in this area, which they used as bases for their settlements. They also made raised fields (*várzeas*) and used them as agricultural plots. To maintain the fertility of these areas, they used the sediments of the ditches located around the fields. This kind of agriculture is an Amazonian technology and came via the Casiquiare Canal and Orinoco to Suriname (Bubberman 1977, 515-517; Versteeg 2003, 97-98; Versteeg and Bubberman 1992, 34). The technique of raised fields is often used in cultures with a great social complexity, for example among the Taíno of the Greater Antilles. It is possible that the peoples who belonged to the Barrancoid and Arauquinoid Traditions were organised in large and complex societies (Alegría 1997, 20; Versteeg 2003, 98, 100).

3.5.3.1 Buckleburg

Around AD 300 two raised mounds located at the bank of a small creek, were made by Neo-Indians now indicated as Buckleburg-1 and Buckleburg-2, on which the people built their villages, while around the mounds several square raised fields were located on which they presumably cultivated manioc. The raised mounds are situated on a thick layer of peat. Next, there is a layer of 10 till 20 cm of clay mound construction, followed by a dark layer with artefacts of human occupation (*terra preta*). This structure was repeated, giving the raised mounds its typical light and dark alternating layers (Versteeg 1985, 668, 670-671, 674-675, 737; 1992, 534; 2003, 100-103; Versteeg and Bubberman 1992, 34, 44).

The pottery is made of local clay, and the majority is tempered with crushed pottery. However, other materials have been used as well like quartz, charcoal or *cariapé* (ash of the bark of *Licania apetala*, which is silicious) (Boomert 1978, 26), shell and mica which is regarded as a-typical. The pottery is made from coils, and the surface of the pottery is grey, orange-grey to orange coloured. The Buckleburg mounds are characterized by Early Mabaruma pottery, which is characterised by broad incisions on the inner lip of eve decorations are rim lobes, appliqués and animal-shaped *adornos* in Mabaruma style (Boomert 1975, 30; Rostain 2008, 286; Versteeg 1985, 676, 678-680, 684; 2003, 103-104; 2008, 307; Versteeg and Bubberman 1992, 35). However, it is possible that we have to regard Buckleburg-1 as a pioneer settlement, as pottery of the oldest layers contains temper that finds it origin in another region. Except for the crushed pottery, all the materials need to be fetched from a distance. The use of crushed pottery as temper is probably an adaptation to the coastal swamps. The Buckleburg people brought their pottery from the outside, or used artefacts from elsewhere (Versteeg 1985, 682, 685). Their subsistence consisted out of fishing and hunting next to their agricultural activities (Versteeg 1985, 681-683; 2003, 104-105; Versteeg 2008, 307). Around AD 700 the raised mounds of Buckleburg were deserted. Buckleberg is the most eastern situated Mabaruma site that belongs to the Barrancoid Tradition (Versteeg 2003, 104-106; 2008, 309; Versteeg and Bubberman 1992, 35).

3.5.4 The Arauquinoid tradition

Around A.D. 700 new artificial mounds were erected further to the west, those of the Hertenrits. It is probable that a new group of people entered the region and chased away or replaced the people of the mounds with the Early Mabaruma pottery (Rostain 2008, 286; Versteeg 2003, 104-105; Versteeg and Bubberman 1992, 35-36). The Hertenrits pottery is different from the Mabaruma style and belongs to the Arauquinoid Tradition (Versteeg 2003, 104-105; Versteeg and Bubberman 1992, 35). The Arauquinoid

Tradition has its origin in the Middle Amazon (Boomert 1977, 508-509), and is less uniform than the Saladoid and Barrancoid Traditions, but it is a single tradition and a cultural unity (Versteeg 2003, 133). This tradition is characterised by incised and punctuated decoration on the ceramics (Versteeg 1985, 658). Common aspects of the Arauquinoid tradition are agriculture on raised fields, specialisation of specific activities like manufacture of tools, trans-cultural trade, similar pottery style and ceremonial artefacts (Rostain 2008, 288). The Hertenrits people erected like the Buckleburg people raised fields, but as the Buckleburg raised fields were squares, those of the Hertenrits were more elongated (Boomert 1976, 137; Versteeg 1985, 715; Versteeg and Bubberman 1992, 37).

3.5.4.1 The Hertenrits culture

The peoples who settled in the west on artificial mounds cultivated on their raised fields manioc (*Manihot* sp.). They substituted their subsistence economy with the hunting of animals and it is probable that they practised some kind of arboriculture (Boomert 1977, 510; 1980b, 78; Rostain 2008, 288; Versteeg 1980, 90; 1985, 715; 2003, 131-132; 2008, 315; Versteeg and Bubberman 1992, 41-42). Some assume that the mounds were built due to the rise of sea level, in order to stay safe. However, it is possible that there were other reasons than ecological ones, like a well-developed socio-political system. Supporting this notice is that the height of the raised fields is much beyond the salt tolerance of manioc, which would increase solely due to the rise of the sea level. Furthermore, the pottery found in all the levels of the mounds is elaborately decorated and does not show any stagnation of food production (Versteeg 1980, 90, 93; 1985, 715). There are several sites known of which several are mounds. Some of these mounds are characterised by *terra preta*. All these sites contain Hertenrits ceramics, and are inhabited around AD 700. It is assumed that the Hertenrits site, which is the largest and longest inhabited, was the social and political centre of all these sites (Boomert 1980b, 71, 77; Versteeg 2003, 110; 2008, 311). Occupation of the mounds after AD 1250 cannot be ruled out (Versteeg 2003, 116, 119).

The Hertenrits pottery contains a wide variety of shapes. The vessels are made of local clay and by coiling. Temper which is used is mainly crushed potsherds, whereas charcoal or *cariapé*, sandstone or crushed shell, were also used as temper. The surface of the pottery is light grey, or orange-grey to orange. The surface is well-polished to irregular (Boomert 1975, 30; 1977, 510; 1980b, 78-80; Rostain 2008, 288; Versteeg 1985, 694, 700; 2003, 113-116; 2008, 312). A distinction is made between Early Hertenrits and Late Hertenrits pottery. Early Hertenrits pottery is characterized by simple decoration and few animal-shaped *adornos* and is found in the early habitation layers

(AD 700 till 1000), whereas the Late Hertenrits pottery contains a wide variety of decoration patterns. Animal and human *adornos* are depicted on pottery, and freestanding female figurines have been found. All decoration patterns of Early Hertenrits can also be found in Late Hertenrits. Late Hertenrits is found in the topmost habitation level and can be dated AD 1000 till 1250 (Boomert 1977, 510; 1980b, 87; Rostain 2008, 289; Versteeg 1985, 708; 2003, 113, 114, 116; 2008, 312; Versteeg and Bubberman 1992, 36-37).

At the Prins Bernhard Polder site an enormous variety of non-organic as well as organic artefacts were found in depositions next to man-made hills. Like other Hertenrits sites, a layer of peat lies underneath the Prins Bernhard Polder site. It seems as if the peoples of the Hertenrits culture had a preference for peaty subsoils. The depositions of the Prins Bernhard Polder took place after AD 1000-1100. It is assumed that this site was of ceremonial importance for the Hertenrits people (Versteeg 1985, 728-733; 1992, 535; 2003, 120, 123-125, 131; 2008, 312-313; Versteeg and Bubberman 1992, 37-39). Human skeletal remains have been found on several Hertenrits sites, from which can be concluded that these people had a complicated burial practice. Primary burials and secondary burials have been found, as well as urns and burial gifts. It can be concluded that these peoples practised skull modification, as individuals were found with wide skull deformations (*brachycephalous*) (Boomert 1977, 511; 1980b, 85, 90; Rostain 2008, 289; Versteeg 2003, 131-132).

3.5.4.2 The Peruvia culture

Peruvia is situated on a ridge near the Coppename River, and it is an interesting site as it holds a mixture of influences. The Hertenrits culture is geographically situated between the Corantijn and Coppename Rivers, whereas the Kwatta culture is situated eastern of the Coppename River. Peruvia is situated in the same geographical area as the Hertenrits culture, but it is influenced by the Kwatta culture. *Terra preta* has been found, which indicates the long habitation of people. Peruvia is dated ca. AD 800 and was inhabited till after AD 1000. The Peruvia pottery is orange till grey-brown in colour. Hertenrits pottery is more greyish coloured than the Peruvia pottery, whereas Kwatta is orange, varying from light-brownish orange to bright orange. Incisions and round impressions are characteristic of Hertenrits, whereas double rows of round impressions, paint, and simple faces are characteristic of the Kwatta culture. Other decorations are typical of Early Hertenrits, which is in correspondence with the earliest date of Peruvia. The raised fields are in correspondence with the Hertenrits culture, as these are unknown for the Kwatta culture. Next to agriculture, these peoples hunted and fished to supplement their diet. The stone material found at Peruvia is more varied than those found at Hertenrits sites. The rough-outs which have been found have their origin not in the coastal area where Peruvia

is situated, but in the interior of Suriname which is in correspondence with the origin of the Kwatta stone material. Moreover, the burials encountered show a complicated burial practice, like secondary urn burial and cremation similar to Hertenrits (Versteeg 1985, 725-726, 738; 2003, 133-137; 2008, 316-317; Versteeg and Bubberman 1992, 42).

3.5.4.3 The Kwatta culture

The Eastern part of Suriname provides the landscape with natural elevations in the form of sand ridges. These so-called cheniers served as the location for early settlements, higher and well-drained, they were useful for agriculture, especially when the subsoil was enriched with shells (Rostain 2008, 290; Versteeg 2003, 139; Versteeg and Bubberman 1992, 42-43). Between the Coppename River and the Suriname River the cheniers are running from east to west, and here ten Kwatta culture sites are located (Boomert 1975, 31; 1977, 511; Versteeg 2003, 140). The most important site of the Kwatta culture is Kwatta Tingiholo. Like Peruvia, there is *terra preta* present which indicates a long period of habitation. However, at Kwatta Tingiholo the *terra preta* is substituted with thick layers of shell which is not found at Peruvia (Versteeg 2003, 141). In contradiction to other Arauquinoid cultures, no raised fields are known for the Kwatta culture, as it is likely that due to the shells in the ridges a fortunate agriculture was provided (Rostain 2008, 289-290; Versteeg 2003, 150; Versteeg and Bubberman 1992, 43). The site can be dated around 1140 and 895 BP which is between the 9th and 12th centuries AD. Kwatta Tingiholo can be regarded as a large settlement surrounded by smaller satellite villages, like Hertenrits (Versteeg 2003, 142-143).

The pottery is ranging from pale brownish orange to bright orange, and is tempered with crushed pottery (Boomert 1978, 25-26; Versteeg 2003, 143-144). Typical decoration patterns of the Kwatta culture are a row of incisions or punctures, as well as red painted bands near the inner or outside of the rim. Furthermore, lobed rims, animal and human *adornos*, thickening of the rim with at the lower side a half-mound pattern, appliqué clay rolls on the exterior surface of the pottery, comparable to those of the Hertenrits culture, are common decoration patterns (Boomert 1975, 31; 1977, 511-512; Rostain 2008, 291; Versteeg 2003, 144, 147-148).

Other artefacts found are beads, projectile points, axes, animal shaped figures, as well as half-fabricates. It is assumed that these artefacts were important valuable items. Rhyolite was the stone used to manufacture these artefacts, and it has its origin in the interior of Suriname. Unsure is how transportation of the rhyolite materials was performed, however, some kind of exchange between the Hertenrits culture and the Peruvia and Kwatta culture must have existed, as these stone artefacts were also found in Hertenrits and Peruvia context (Boomert 1977, 512; Versteeg 2003, 150-151, 154-155,

157-158). It is assumed that the Kwatta peoples were focused on the manufacture, transportation of raw and finished artefacts within trade networks, and that they obtained the materials from the Barbakoeba culture (Rostain 2008, 290, 292).

The Kwatta culture had a complex burial culture. Primary inhumations show the body in a flexed anatomically correct position. Secondary burials were not in an anatomically correct position due to reburial. Some of them were buried in or near an urn, whereas other graves contained remains of several individuals. Furthermore, skulls have been artificially deformed at a very young age (Boomert 1977, 512; Versteeg 2003, 158-160), which was already encountered among the Hertenrits culture.

3.5.4.4 The Barbakoeba culture

Between the Commewijne and Marowijne rivers in Eastern Suriname, the Barbakoeba culture is found. Nine sites have been found on the coastal cheniers of Suriname, whereas more sites are to be found in French Guiana. Raised fields with square till elongated shape are associated with the settlements on the cherniers (Boomert 1977, 512; 1993, 199; Rostain 2008, 292; Versteeg 2003, 160-161; Versteeg and Bubberman 1992, 43). These peoples supplemented their agricultural practices by hunting and fishing (Boomert 1993, 209). The Barbakoeba culture can be placed between AD 650 and 1250 and is part of the Arauquinoid Tradition (Boomert 1993, 205).

The pottery is tempered with coarse material (Rostain 2008, 292), like crushed shell, charcoal and quartz sand, and was made coiling (Boomert 1993, 202). Typical for the Barbakoeba culture are corrugated rims where the clay coils are still visible. Lugs in the shape of symmetrical ‘eye’ or simple figure or animal occur, as well as *adornos* in the shape of humans or animals, as well as figurines. Pottery artefacts include griddles and pot stands with projections at the upper side which are typical for the Arauquinoid Tradition (Boomert 1977, 512; 1993, 202-203; Versteeg 2003, 160-163; Versteeg and Bubberman 1992, 43). Stone artefacts are also known for the Barbakoeba culture, like axes, hammerstones, polishing tools, and grinding stones (Boomert 1993, 203). It is assumed that the Barbakoeba culture had contacts with the Kwatta and Koriabo cultures, based on pot shards and a nephrite frog which are not of Barbakoeba origin (Boomert 1993, 203; Rostain 2008, 292; Versteeg 2003, 163-164).

3.5.5 Cultures of the interior

Archaeological sites in the interior of Suriname are located on the high, sandy banks of rivers and creeks. Here, next to stone artefacts a lot of rough, undecorated pottery has been found, whereas bone and shell materials were not preserved, due to the acidity of the soil. Taken all this in consideration it makes it hard to distinguish different kinds of cultures. However, it is probable that the peoples who inhabited these areas practised shifting cultivation (slash-and-burn), as well as fishing and hunting (Versteeg 2003, 177; Versteeg and Bubberman 1992, 46).

3.5.5.1 The Koriabo culture

Around AD 1200 a new pottery style known as the Koriabo pottery style entered Suriname from the east. Many sites are known from Northern and Southern Suriname, while in the coastal area between the Coppename River and the Corantijn River no sites of this culture have been found yet. This is the area where the Hertenrits culture was active, which would suggests that they were still present when the Koriabo culture entered the area. Besides, the sites of the northern part of Suriname are younger than those in the south, which suggests that the Koriabo people originated from the Lower Amazon or the centre of the Guiana Shield, which is confirmed by the pottery style. The peoples of the Koriabo culture re-inhabited former settlements and their culture existed on into the colonial period (Boomert 1977, 512; Rostain 2008, 298; Versteeg 2003, 183, 185-187; Versteeg and Bubberman 1992, 45). Koriabo pottery is often tempered with sand, mica or *cariapé* (Boomert 1977, 512). Next to the different vessel shapes the typical decorations consist out of thin line or wide incisions, and small or large animal or anthropomorphic *adornos*. Lobed rims and black, red and white painting are decoration patterns. Other objects include stone axes, hammerstones, polishing stones, manos and mutates, and spindle whorls (Boomert 1975, 31; 1977, 512; 1978, 26; Rostain 2008, 299; Versteeg 2003, 182-183, 186). The Koriabo culture is the only true Guiana cultural style which is not found outside this area (Rostain 2008, 299).

3.5.5.2 The Brownsberg culture

The Brownsberg culture mined stone material (metabasalt) from the Brownsberg, and processed it into semi-finished products in the valley of the Suriname River at the foot of the Brownsberg. They made a distinctive kind of pottery which can be dated between AD 1000 and 1500. The pottery is tempered with coarse quartz. The decoration is characterised by incised rims, whereas the vessel wall is decorated with non-parallel non-intersecting lines, lines which do intersect in all kind of patterns, and nubbins (Boomert 1977, 513; Versteeg 2003, 189-190; Versteeg and Bubberman 1992, 47). Stone artefacts

found vary from half-fabricates, to hammerstones and finished axes. The metabasalt was probably traded with villages of the Kwatta and Barbakoeba cultures. This is supported by the artefacts found in Kwatta Tingihole. Likewise pottery of the Kwatta and Koriabo cultures have been found at the Brownsberg sites (Boomert 1977, 513; Versteeg 2003, 190-191; Versteeg and Bubberman 1992, 48).

3.5.5.3 The Pondokreek culture

The Pondokreek site is situated in the interior of Eastern Suriname. The site consists out of a low hill situated between merging rivers, with on top of the hill a trench in which charcoal and some sherds were found. However, no *terra preta*, as well as changes in vegetation have been found. The charcoal is dated around AD 850. The sherds are tempered with large quartz grains and were decorated with some finely finished nubbins. In French Guiana there have been 18 comparable sites found. Merely based on an oral tradition, it is thought that these sites were fortified villages with palisades. However, no postholes were found in the trench (Versteeg 2003, 192-193; Versteeg and Bubberman 1992, 48-49). It is assumed by Versteeg that the purpose of the trench was rather a ceremonial-ritual one than a defensive one, as the trench is too big to defend (Versteeg 2003, 194-195). Especially as there are so few artefacts found, and making this trench is quite labour intensive.

3.6 Suriname from discovery to colony

Christopher Columbus discovered the Caribbean islands in 1492. The discovery of the mainland of the Americas followed not long afterwards. Suriname was discovered in 1499 by Alonso de Hojeda with Juan de la Cosa and Amerigo Vespucci, who travelled in two ships, and reached the "Wild Coast" of the Guianas at the Marowijne River (Loor 1977, 233). Around this time the "Wild Coast" was populated with groups of Maipure-Arowakan and Cariban language families (Boomert 1975, 32; 1977, 513; Kloos 1977, 296). Despite this fact, it is important to mention that little is known of the coastal and inland Amerindians before the seventeenth or even eighteenth centuries (Harris 1928, 75 cited in Carlin and Boven 2002, 13), while the most distinctive groups during the early post-Columbus period were the Arawaks, Caribs and Warao (Carlin and Boven 2002, 13).

The Spanish were the first Europeans who set foot on the coast of the area which is nowadays called Suriname. Not only were the Spanish in search of Eldorado and its gold in the hinterland of the Guianas (Loor 1977, 233), but they tried to christianise and control the Amerindians living in these regions. The other nations, who followed later

and were active in this area, were the French, English and Dutch, which mainly had business interest with the Amerindians as potential trade partners. The various Amerindian groups saw the arriving Europeans as companions or enemies to be set up against other European nations and neighbouring Amerindian groups. The Caribs and Arawaks were always in confrontation with each other, and they used the European alliances for favouring their Amerindian war (Carlin and Boven 2002, 16-17). The new arrivals transferred diseases to the Amerindians and furthermore, being enslaved by the Europeans steadily depleated the numbers of the Amerindians (Carlin and Boven 2002, 15; Kloos 1977, 298). Moreover, due to European colonisation and expansion the Amerindians retreated further into the forests (Boomert 1977, 513).

Under Willoughby Suriname became a colony in 1651. He sent English settlers from Barbados, and probably from St. Kitts, as well as other Caribbean islands, to Suriname. These settlers were already acquainted with sugar plantations, which led to a prosperous colony. Before 1651 there were at least four attempts by the French, two of the English and two other attempts of the Dutch to settle on the coast of Suriname, ranging from the 1610s till the moment Suriname became a colony under Sir Willoughby (Arends 2002, 115-118; Loor 1977, 233). For instance the first Dutch settlement was reported along the Corantijn River in 1613, but was destroyed by the Spanish in 1614 (Loor 1977, 233; Versteeg 1985, 735).

Next to the English planters, Sephardic Jews from Brazil and the Iberian Peninsula (Portugal and to a lesser extent Spain) settled in Suriname between 1665 and 1667 and were active in plantation agriculture (Arends 2002, 118). From the start the relationship between Amerindians (Caribs) and the English settlers was not friendly, but truce was made between the different parties in 1645. However, the Kari'na (Caribs) discovered that the colonisers expanded and took more land than originally agreed (Carlin and Boven 2002, 19; Kloos 1977, 296). Even the slaves were in revolt against their oppressors, and it is in this period that a lot of Maroon communities were formed in the forests, which affected the settlements of the Amerindians even further retreating into the forests. At the same time the English had an internal struggle, and dealt with an epidemic, which resulted in a weak colony. Consequently in 1667 the colony was conquered by the Dutch Province of Zealand (Carlin and Boven 2002, 19), and English planters left Suriname with their slaves and fled to Barbados and Jamaica leaving the colony in ruins. Suriname became officially Dutch in 1668, when the Treaty of Breda was signed (Arends 2002, 119), and New Amsterdam (New York) was exchanged for Suriname.

With the help of new slaves, Dutch employers, Jews and English planters, and planters from elsewhere the colony was built up again (Loor 1977, 234). From 1667 to 1683 the colony of Suriname was under the jurisdiction of Zealand. Hereafter it was

transferred to the Society of Suriname, composed of the West India Company (WIC), the city of Amsterdam, and the Van Aerssen van Sommelsdijck family (Arends 2002, 199).

3.7 The Amerindian and Maroon wars

Prior to 1675 it is quite unclear from where the African slaves originated. It is known that the English and Dutch were involved in the slave trade in Suriname before 1675. These slaves came from the "Slave Coast" (the coastal areas of Togo, Benin, and eastern Ghana), whereas the African slaves imported after 1675 came not only from the "Slave Coast" but also from "Loango" (the coastal areas of Zaire, Congo, and Northern Angola) (Arends 2002, 118, 121). The slaves mentioned in the early settlements were Amerindians. It is possible that in the 1630's the English Captain Marshal deported African peoples to his settlement in Suriname to be forced labourers (Arends 2002, 116, 118).

Communities were formed of runaway slaves and Amerindians. Along the Coppename River a community was formed of mixed black and Amerindian origin, known as *Karboegers* who spoke Kari'na (Boomert 1977, 513; Carlin and Boven 2002, 19). This happened around 1660, and in 1755 it was stated by Theophile Schumann that these escaped slaves were already mixed with Kari'na Amerindians (Smith 2002, 141-142). The word *Karboeger* can refer to three different meanings: (1) "a mixture of a mulatto and a negro", (2) "a mixture of an Amerindian and a negro", and (3) "a mixed Amerindian / negro group living in Western Suriname" (Smith 2002, 142, 151).

The relationship between the Amerindians and the Dutch was poor, and got worse from the start, which in 1675 resulted in a guerrilla war between the Dutch and various Amerindian groups, mostly Caribs (Boomert 1977, 513; Kloos 1977, 296). This guerrilla war led to the (Amer)Indian Wars (1678-1684), and brought the colony almost to despair (Arends 2002, 121; Boomert 1977, 513). Also during this period African slaves escaped from the plantations and settled in the tropical forests to establish free communities (Arends 2002, 116, 118, 122). The establishment of free slave communities and the attack of the colony by these communities is known as *grand marronage*. The Maroons tried to free other slaves and to steel tools, guns and other equipment which the forest could not provide for. Also women and children were freed in order to maintain the free communities. The escape of slaves from plantations who had no direct intention to establish themselves permanently in the forest is known as *petit marronage* (Stipriaan 2009a, 16-17)

Only in 1686 was a treaty signed by the Amerindians and Van Aerssen van Sommelsdijck, which assured peace between the Dutch and the various Amerindian

groups, and especially among the Arawaks and Caribs (Boomert 1977, 513; Kloos 1977, 296). Furthermore, it was decided that the Arawaks, Caribs and Warao were free from slavery. Although it did not assure freedom for the Amerindian groups of the interior as they were still captured and sold into slavery by the Caribs (Carlin and Boven 2002, 19). Most of the people sold belonged to Arawak tribes (Arends 2002, 118).

At the end of the 17th century the war between colonists and Maroons became more forceful and plantations were attacked. In the beginning of the eighteenth century, steadily more Maroons settled along the Suriname, Saramacca, Marowijne, Lawa and Tapanahony rivers, which caused the Amerindians to retreat even more into the interior. The Maroon villages influenced the contact of Amerindian tribes; their communities created a wall between the coastal and interior Amerindians (Boomert 1977, 513-514; Carlin and Boven 2002, 16). The coastal Amerindians are the Arawak and the Caribs, whereas the interior Amerindians are the Akuriyo, Trio and Wayana (Kloos 1977, 296). The Wayana settled in southern Suriname in the early 18th century, as they were on the run from the Portuguese in the Amazon area. The Trio are probably a conglomeration of retreated subgroups, of which the Akuriyo are one of these groups (Boomert 1977, 514). The Akuriyo, Caribs, Trio and Wayana speak a Cariban language, whereas the Arawaks speak an Arawaken language (Kloos 1977, 296). The Maroons traded with Amerindians like the Trio, Wayana and Caribs, and they prevented that the Europeans had any contact with the Amerindians. To trade and negotiate the Maroons used a pidgin language based on Ndyuka and elements from Amerindian languages (Carlin and Boven 2002, 24, 26).

Missionary work among plantation slaves was now allowed (Arends 2002, 126-127), as plantation owners were afraid of resistance and rebellion among slaves. Around 1735 Moravian missionaries, who were German speaking Protestants, were restricted to preaching among the coastal Arawaks that lived in the stations of the mission (Carlin and Boven 2002, 29). It was not until 1765 that the Moravian missionaries were allowed to evangelize among Saramaka Maroons, and not until the 1820's that they could perform their missionary work at a restricted level among Creoles in Paramaribo (Arends 2002, 126-127). However, due to diseases and the fact that the Amerindians were forced by the Dutch colonists to track and hunt down the Maroons, attacks on the missions by the Maroons followed, and the missions failed (Carlin and Boven 2002; Kloos 1977, 296). The Catholic Church started missions among Amerindians in 1817 only (Carlin and Boven 2002, 30).

As a result of the liquidation of the WIC in 1795, the Society of Suriname was dismantled (the Van Aerssen van Sommelsdijcks had already stepped out in 1770), and the colony came to the hands of the Dutch Republic. At that time the Dutch Republic was part of the Empire of Napoleon and since England was in conflict with France, the colony

came under English rule from 1799 until 1816. New British planters settled in Nickerie. The English abolished the slave trade in 1808, but illegal slave importation did not stop until 1830, as Suriname became a Dutch colony again in 1816. However, from the 1820's the slave owners had to improve the living conditions of their workers as they were aware of the near end of the slave trade (Arends 2002, 126-127).

3.8 From emancipation till civil war

On the first of July 1863 Emancipation was declared. However, the slaves were not free to go until 1873 when they were officially released and free to leave the plantations. Now, the plantations needed other workers, and contract labourers were found in Asia: China, India and Java, so an amount of 70,000 Asian contract labourers migrated to Suriname, which could return home after expiration of their contracts (Arends 2002, 127; Loor 1977, 236). In 1954 partial autonomy was granted to Suriname by the Netherlands, whereas in 1975 Suriname became fully independent. However, a military regime took power in the early 1980s leading to a civil war from 1986 till 1991 (Arends 2002, 129).

To assure the accessibility of the interior of Suriname Operation Grasshoper was executed. This was done by cutting air strips at strategic points in the inland were the Trio and Wayana lived. Near these airstrips, the American missionary group Door-to-Life mission set up various stations, which resulted in stabilization and upward demography, with larger villages and less autonomy for groups, but with a village government (Carlin and Boven 2002, 35). However, the national government did not control what was executed in these villages and the missionary schools followed their own plan. Finally, the missionary influence came to an end due to the interior war between the military regime under the leadership of Desi Bouterse and the Jungle Commando run by Ronnie Brunswijk, which unfortunately incorporated many Amerindians. For example, under the name Tukuyana a group of Kari'na and Arawaks attacked the Maroon and Arawak settlements and further were Trio men enlisted to attack the Maroons. However, as some Amerindians were pro-Bouterse and others were pro-Brunswijk, the Amerindians were left with internal conflicts themselves. As a result of this internal war, both the Maroons and the Amerindians faced a lack of authority towards the elders, isolation or abandonment of villages, youngster abandonment of school, and shortage of manufactured supplies. This was both the situation the coast and the interior area and therefore a lot of the Amerindians as well as Saramakka, Ndyuka and Boni Maroons fled to the neighbouring countries like French Guiana and Brazil (Arends 2002, 129; Carlin and Boven 2002, 37-38).

Since the mid-1990s various organizations assured developmental projects among the Amerindians (Carlin and Boven 2002, 38-39). Nowadays, the Amerindians and Maroons deal with modern kind of problems like goldmining, and its direct consequences caused by the flushing of mercury in their waterways which poisons their food, causes illnesses and increases the number of deformities in newborns. Also the flourishing prostitution in goldmining camps makes way for an increased number of HIV-positive persons (Carlin and Boven 2002, 41-42).

3.9 Summary

Due to the tropical climate the only material culture which was preserved were non-persihable materials. The southern part of Suriname was already inhabited around 11,000 BP by Paleo Indians. Around 4,000 BC we see a shift in subsistence strategy influencing the economy culture and material expression: (1) shifting cultivation; (2) tools to process plants were probably used next to gourds and calabashes; (3) complex housing; (4) use of canoes; (5) extended family; (6) shamanism. The Saladoid peoples brought decorated pottery and slash-and-burn agriculture to Suriname. Around the second millennium BC the Barrancoid Tradition forced the Saladoid peoples to leave. They introduced raised fields for agriculture. Around AD 700 the Arauquinoid tradition was migrated to Suriname which expressed itself in specialisation of activities, trans-cultural trade, similar pottery style and ceremonial artefacts among these cultures.

Suriname was discovered in 1499 and was populated by Maipure-Arowaken and Cariban language families. Due to diseases and enslavement the numbers of Amerindians steadily depleated. In 1651 Suriname became a Britisch colony, but was conquered in 1667 by the Province of Zealand. Escaped African slaves settled in the interior of the tropical forest (Maroons) and communities were formed from runaway slaves and Amerindians. Not only did the colony suffer from attacks of Maroons, but also from attacks of Amerindians. The Maroons created a wall between the coastal and interior Amerindians and prevented the Europeans from contact with interior Amerindians. In 1795 the colony came in hands of the Dutch Republic, but came under English rule from 1799 till 1816. Suriname became a Dutch colony again in 1816. The slave import did not stop until 1830. On the first of July 1863 Emancipation was declared, and in 1873 slaves were officially free. In 1975 Suriname became independent. The interior was made accessible by cutting air strips at strategic points which assured the stabilization and upward demography of interior villages. The civil war (1986-1991) brought an end to the activities of missionaries and organisations. Nowadays, Amerindians and Maroons have to deal with the problems of goldmining.

Chapter 4 Maroon calabashes and gourds

4.1 Introduction

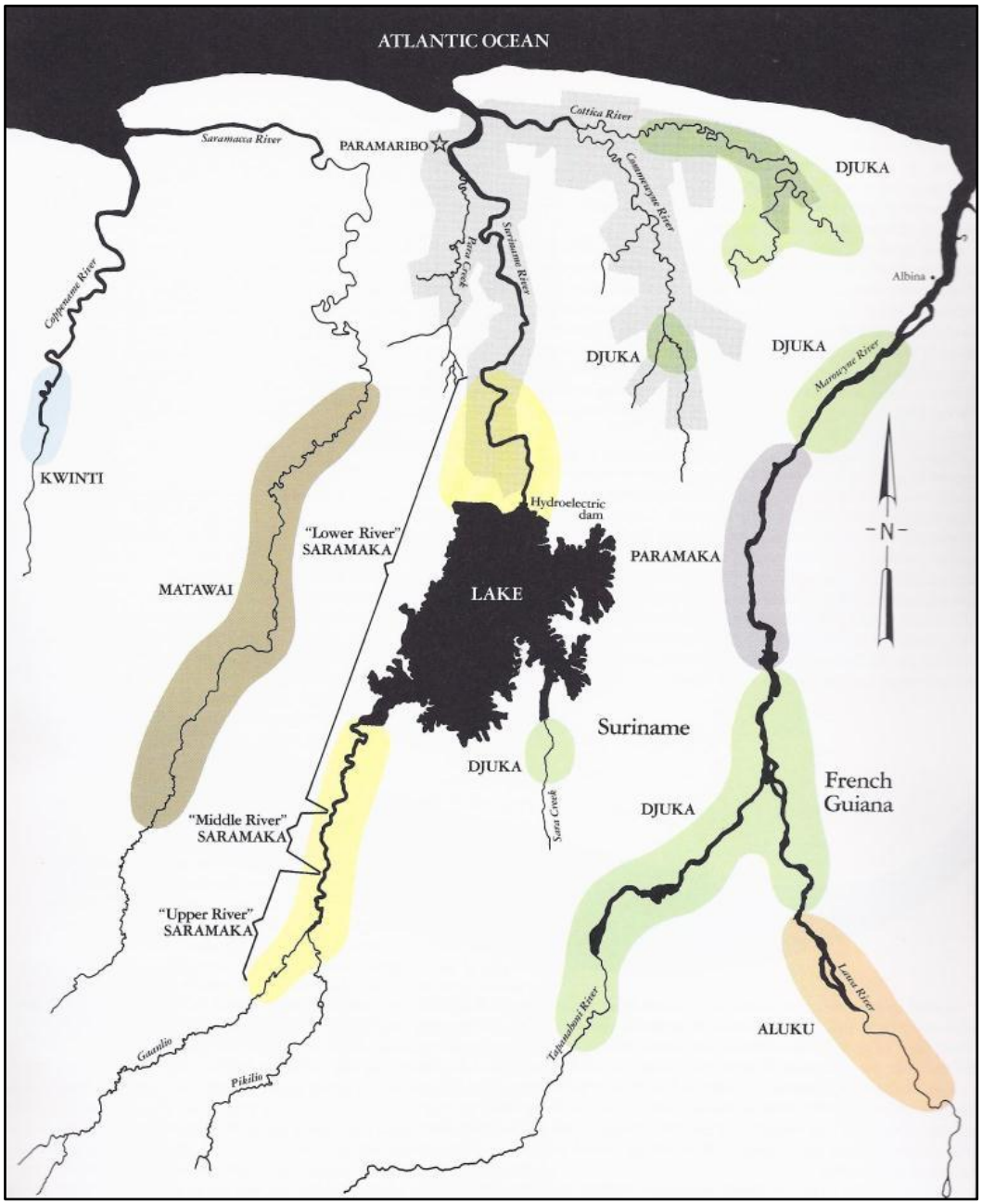
The Maroons use both the calabash tree (*Crescentia cujete*) and the bottle gourd (*Lagenaria siceraria*) as raw materials for several objects. However, the calabash tree and the bottle gourd are from two different plant families and as such they are prepared with different techniques, used for specific purposes, and decorated using different methods (Price and Price 1980, 150). This chapter is not only about the materials which are used, but also about the people who use these calabashes and bottle gourds, as we cannot discuss objects without placing them in the context of their daily users. The ethnographic research, based merely on Saramaka Maroon use, as most of the research about calabashes has been conducted here, will be supplemented with the museum objects of the Suriname collection of the National Museum of Ethnology in Leiden, as well as a few objects of the Suriname National Museum in Paramaribo.

4.2 Maroon society

The Maroons are the descendants of runaway slaves who settled in the tropical rainforest. The word *Maroon* is derived from the Spanish word *cimmarón* which on Hispaniola referred originally to runaway cattle, later on to escaped Amerindian slaves, and eventually around the end of the to 1530's, it referred to escaped African slaves (Price and Price 1980, 217). However, in the literature they are also named "*Bosnegers*", *Lowéman*, *Busiman* and *Fiiman* which are equivalents for the Dutch name. The people themselves all have different preferences (Thoden van Velzen and Hoogbergen 2011, 1-2), but in this thesis the term Maroons is used as this is the most general term used in the literature. It is important to keep in mind that Maroon communities were not only formed in the Caribbean and Americas from African slaves, but also from African slaves and Amerindians as recent archaeological evidence suggests (Agorsah 2007, 333, 336; White 2010, 474).

The Maroons of Suriname are organised in six different tribes. Settled in central Suriname are the Saramaka, Matawai and Kwinti, whereas the Ndjuka (formerly Djuka), Aluku and Paramaka are situated in eastern Suriname and western French Guiana (map 2). In the past run-away slaves of the same plantation or several plantations formed groups, which eventually led to the formation of different tribes with several different clans. Nowadays a lot of Maroons live in the capital city Paramaribo or the coastal regions of French Guiana, and even in the Netherlands. The differences between the tribes of central Suriname and eastern Suriname are distinctively noticeable looking at

language, diet, clothing, marriage patterns, residence, and wage labour. However, due to modern influences like government and commercial labour, e.g. mining activities, the differences between the various tribes are rapidly growing (Price and Price 1980, 15; 1999, 19; Thoden van Velzen and Hoogbergen 2011, 2-3).



Map 2. The different Maroon groups indicated for Suriname. The grey coloured area in the coastal area is where previously the plantations were located. Details like mixed villages are not indicated. Rather than a specific overview this map gives only a general image of the habitation areas of the different Maroon groups (Price and Price 1980, 17).

Every Maroon group has a paramount chief, except for the Kwinti. These headmen and other village officials are active in the villages. A Maroon village is inhabited by around 100 to 200 people (Price and Price 1999, 19). The villages are situated along rivers and do not have a strict ground plan, and are characterised by small houses, open sided structures, shrines, domesticated trees and cleared ground. Usually shrubs within the village separate the houses of matrilineal kingroups. From the river a main path leads to the villages, where other paths lead to gardens, toilets, and streams (Price and Price 1980, 23; 1999, 28).

Most of the work and social life is conducted outside the houses. Besides, both women and men own several houses. The women have several houses located in their birth village, their horticultural camp and the village of their husband (which is built by their husband). The men have three to four houses which are built at different moments in time and are built for their current or former wife or for themselves (Price and Price 1980, 18; 1999, 20). The houses are small, and preferably have two rooms, although one-room houses are more common. Usually, the small back room contains the hammock or double bed, whereas the front room is used for some meal preparation, communal meals, private visits, as a parlor, and women use their creek sand floor houses to store their cloths and household items. The calabashes, enamel, and aluminium household items are displayed in the palm-woven walls (which is preferred above wooden shelves) (fig 8 and 9). In this way the items are stored and kept clean and neat (Price and Price 1980, 28, 30; 1999, 29-30). The houses of men are different in comparison to those of women, and usually these are smaller, and have wooden walls and floors. It is more common to find coastal goods and furniture in men's houses than in houses of women, especially since the Maroons have always been dependent on the coastal area for commercial goods, and nowadays, the Maroon men work in logging, bleeding of *balata* (rubber trees), river transport services, construction work, mining and other industries away from the common villages (Price and Price 1980, 19, 30; 1999, 21, 32).

The subsistence of the Maroons is based on what the tropical forest has to offer, hunting and fishing as well as shifting horticulture, which was learned from the Amerindians (Thoden van Velzen and Hoogbergen 2011, 3). The work division is based on gender: the shifting horticulture is done by women, whereas the men help with the clearing of the plots, and supplement the diet with hunting and fishing. However, fishing is also done by women and children (Price and Price 1980, 18-19; 1999, 20-21), which is similar to the Amerindian division of labour. The domesticated trees in the villages are planted by individuals who own these trees. In this way the diet is supplemented with for example oranges, mangos, bananas, coconuts, palm nuts, and limes. Also calabashes are planted for their fruits (Price and Price 1980, 23; 1999, 28). The horticultural camps are

located near streams further into the forest away from the villages, and the buildings are characterised by simple, little wood constructed open structures, one-room buildings, usually constructed by women. These camps serve as base camp from which one can reach the nearby gardens (Price and Price 1980, 27; 1999, 28). The women cook and serve meals for their men, which are various dishes ranging from vegetables, meat or fish, to manioc served on enamel, or aluminium plates. The calabashes are accompanied as drinking cups or washing bowls. While the men share their dishes with each other, the women eat informally in their houses (Price and Price 1980, 30, 33).

The villages are organised according to matrilineal relationships. This does not mean that the lineage of men is less important. They take part in the raising of their children. Children live with their mother until they are four or six years old. After this period they are given to a kin, who takes care of the development of the child. This depends on the marital status of the parents or residence patterns, and over time the caretaker of the child can change as the needs of the child change. Men are polygamous, and can have several wives at one moment, but not more than three at a time (Price and Price 1980, 15, 18; 1999, 19), whereas women have only one husband at a time. These peoples are highly mobile, as their social networks extend beyond the village boundaries. Men and women have their own canoes, in order to maintain their social networks and fulfil their social obligations (Price and Price 1980, 18; 1999, 20). The Maroons are matrilineal, but they are not matriarchal. Maroon women are independent in various ways, but they are not free in Western terms. Furthermore, they are also not passive and admiring recipients of their men's art, but they are producers of art themselves (Price 1993, 1, 3) as we shall see in paragraph 4.6.

Figure 8. Storage of calabash spoons and bowls in a women's house, Dangogo 1968 (Price and Price 1980, 31).

Figure 9. The storage of calabash bowls in a woman's house (Poll 1951, Plate 198 in Price and Price 1980, 31).

Ritual life is important and makes up part of daily life in this society. Ancestors, forest spirits, deities, and snake gods are incorporated into daily life. Communication with these powers is done through consultations of oracles, spirit possession, and the interpretation of dreams (Price and Price 1980, 18, 1999, 20). Men serve as priests, whereas women can only serve as mediums for spirits (Price 2003, 31). The *Winti* religion is shared by Maroons as well as Creoles due to their common origin from Africa, as they incorporated African spirits and gods in their ritual life (Bruining and Voorhoeve 1977, 678). Even Amerindian spirits are incorporated in the ritual life of the Maroons, as the Amerindians are recognised as the original people of Suriname, and their spirits needed to be part of the religion of the Maroons. These spirits, which are mostly waterspirits, are known as *Ingi winti* (Pollak-Eltz 1970, 174). Among the Creoles of Suriname are Amerindian waterspirits known as *Watra Indji*, and are associated with watergods from Sierra Leone (Wooding 1979, 184) whereas Amerindian forest spirits are known as *Busi Indji* (Wooding 1979, 198). It becomes clear from songs during *Winti* dance rituals that the words are mixture of Sranantongo, African and Amerindian words (Wooding 1979, 341).

The life of these peoples is influenced by the widespread use of the outboard motor, air service, economic projects e.g. mining, timber and the hydroelectric project, political transformations like the independence of Suriname in 1975, and the civil war of the late 1980's (Price and Price 1999, 22; Stipriaan 2009b, 125-127). These influences transform a society, and as such it is possible that they have also an effect on the material culture of these people as we will see in the next paragraphs.

4.3 The preparation of calabashes

The Maroon women plant the calabash trees in villages and horticultural garden camps. The harvesting of the fruits is usually done by women and the preparation of the calabashes starts with the selection of the fruit on the calabash tree. The knife is knocked against the outer surface of the fruit: if the sound is right the calabash is taken from the tree, otherwise it is left for ripening. The calabashes are cut open with a knife, and the pulp is removed with a spoon or by hand. Then, the shells are boiled in water for less than a half hour, and the remains of the pulp are scraped out with a spoon. The calabash is then shaped by breaking parts of the side with the hands or teeth at the rind edge of the calabash, and the rind is smoothed with a knife. A piece of glass is selected and shaped in the right size to apply the decoration. One starts with the interior border, after which the inner design is planned and executed. Glass is used to incise the design: on one side the line has a sharp edge and on the other side this has a shaded effect. To finish the decoration a band is scraped along the exterior rind surface of the bowl. Afterwards the calabash is put into water for over a week. This is done to soften the calabash after which it is rubbed smooth with a leaf and with fine sand followed by sun drying (Price 1993, 88-89; Price and Price 1980, 152-153; 1999, 205). However, it is also mentioned that it can be dried above a fireplace (Muntslag 1979, 123). In the final phase the calabash shell is rubbed with limes, rinsed and dried again in the sun, after which the calabash is ready for use. Those calabashes which are used as containers are made ready in the same way as the bowls. Next, the containers are given to men, who decorate them with the use of compasses, pocket knives, and small chisels (Muntslag 1979, 123; Price 1993, 89; Price and Price 1980, 152-153; 1999, 205).

Among the Saramaka Maroons the calabash trees are owned by women, and as such the calabashes produced by women are considered as their property, and even the covered containers which are given to men to decorate are seen as women's property. The women produce several calabashes at a time (Price 1993, 87-88; 2003, 21). The men do not talk about calabashes (Price 1993, 87), because these are women's property and can nowadays be seen as an artistic medium for women.

4.4 Object categories

Objects made of calabashes can vary in shape, size and function, thus they can be categorized. According to form and function Price established a terminology for objects of the Saramaka Maroons which distinguishes three kinds of categories namely: containers, bowls, and spoons/ladles/rice mounders (Price 1993, 89; Price and Price 1980, 150; 1999, 206).

Muntslag makes a distinction based on the fruit's size and shape, which determine its function, and he names nine absolute categories of calabash objects, namely: *wasi (dede) krabasi, dringi krabasi, kaseer krabasi, atita krabasi, woron-godo krabasi, godoe-soe krabasi,* and *ang-kwi krabasi*. Absolute as a term indicates that the object is used for a certain specific purpose and it can and may not be used for another purpose. *Krabasi* means "calabash" in Sranantongo. However, a deeper meaning comes from *Kra* meaning "spirit", whereas *basi* meanings "boss", and as such it refers to spiritual and religious actions. Combined with the other words this would refer to the purpose of the objects (Muntslag 1979, 123).

Dark makes a distinction in calabashes based on the form and the surface decoration (decoration is described in paragraph 4.6). As depicted in fig 10 he designates four different calabash forms namely: *hemisphere*, *ovate hemisphere*, *hemisphere plus* and *spherical intercept* (Dark 1951, 57). While in a later publication he only makes a distinction between hemisphere forms and spherical forms (fig 11) (Dark 1954, 32). Comparing the accompanied drawings in both publications it becomes clear that the drawings and the figure text are not in correspondence with each other, as the text of fig 10 c and d are mixed up in the publication. However, his categorisation is based on the objects namely: bowls, plates, spoons and watertight containers (Dark 1951, 59).

For this thesis the Price categorisation (1993) will form the basis, as it is the most clear and supported, it will be supplemented with the other categorisations.

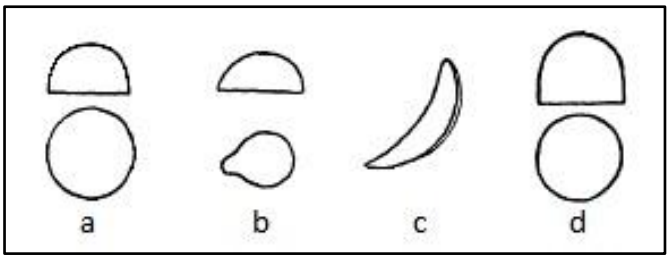


Figure 10. Different shapes of Maroon calabash objects, a - hemisphere, b - ovate hemisphere, c - hemisphere plus, and d - spherical intercept (Dark 1951, 57).

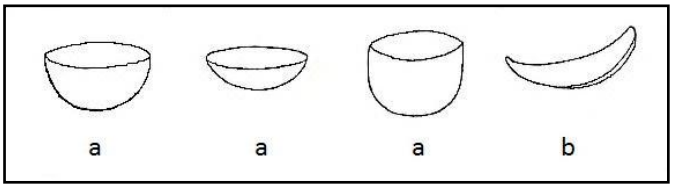


Figure 11. Different shapes of Maroon calabash objects, a- several hemisphere shapes, b- spherical intercept form (Dark 1954, 32).

The Maroons make further a distinction between seven varieties of calabash trees or *kúya*. Large rice washing bowls are made from a calabash variant which produces large fruits with a thick shell, the (1) *gaán kúya* tree. These are also used as bowls used to wash a body before burial. Spoons and ladles are made from (2) the *pempe kúya* tree or (3) *kuyêè* trees. The covered containers are made from the (4) *koómbu kiíki* tree, whereas drinking bowls and hand-washing bowls are made from either (5) the *bakáa kúya* or (6) the *mátu kúya* tree. Drinking cups are made from (7) the *bíngo kúya* tree (Andel and Ruysschaert 2011, 120; Price 1993, 87; Price and Price 1980, 150). Not only is this observed by the Prices, also Muntslag mentions this in his publication: there exist different *krabasi* tree species that produce fruits of various sizes and form (Muntslag 1979, 123). The Maroons have categorised these different cultivars for specific functional purposes.

4.4.1 Containers

Covered containers are made from one single calabash fruit cut along the mid-line. The fruits are cleaned by women followed by decoration of the outer surface by men (Price and Price 1980, 150, 152; 1999, 206). Calabash containers as well as gourd containers are called *apaki* by Saramakas and eastern Maroons, whereas the Jamaican word *packy* refers to the tree, fruit or container of the calabash. These words are probably derived from the Twi word *apákyi* or the Ga word *akpaki* which would refer to calabash. However, eastern Maroons call calabash container also *pakiba* (Price 1993, 94; Price and Price 1980, 219; 1999, 323). There is a distinction based on size and function: (1) *gwamba apakí* are large undecorated containers to store rice, or to store salted meat or fish; (2) *maíki apakí* are medium-sized containers used to carry winnowed rice to the husband's village and are decorated by men; (3) *sátu apakí* are small-sized undecorated containers used to store salt; (4) *biôngo apakí* are small undecorated containers to store herbs, kaolin, and other ritual products, which often have fiber handles (Price 1993, 89; Price and Price 1999, 206). Further, although with no specific name, the covered containers are used as lunch box for the men's day away from home: the food is put in a covered bowl, and together with a drinking cup, and a spoon, these are placed in a large covered container (Price 1993, 89-90; Price and Price 1980, 150).

Muntslag has the following categorisation: some of the object categories of Muntslag can be categorised under the same "covered container" category of the Prices. (1) The *woron-godo krabasi* is a kind of container for transporting small objects, and in general worms on a fishing enterprise. *Woron* means "worm", whereas *godo* refers in this example to a calabash just cut above the middle. To keep the bowl and cover together they are connected using a rope. (2) The *godo-soe krabasi* are made of larger calabash

fruits and are used to carry fish. An opening is made in the top of the calabash (Muntslag 1979, 124), and whether it has a cover is unclear. The containers according to Dark's categorisation consist of an ovate hemisphere and a hemisphere plus, placed over each other, and are watertight (Dark 1951, 58-59). In his later publication he only refers to these as hemispheres (Dark 1954, 32).

All the containers encountered in the National Museum of Ethnology made of calabashes can be found in table 2. The largest number of objects consists of covered containers made by Maroons and are decorated with engravings. However, also calabash containers which do not have a cover, but which are according to their shape are only used as containers are part of this table. From the research in the National Museum of Ethnology it became clear that there are also containers which can be categorised as baskets. They occur in two different kinds of shapes, of which the first is completely made of a calabash including the handle. The handle is often broken and these container baskets are decorated with engravings and sometimes even with *pemba dotti*, white kaolin clay. The second group of container baskets is made of a calabash bowl and cover with a wooden handle and feet connected to the calabash with the use of metal pins. These baskets are decorated with commercial paints depicting hearts, Dutch aphorisms, and flowers. Also incised baskets with commercial paints were encountered. It can be assumed that these objects were made by plantation slaves, or by coastal peoples. Especially as they are unknown in the research of Price (1993) and if we compare them to calabash bowls decorated in the same style of decoration (paragraph 4.6.1) it can be assumed that these objects were not made by Maroons. As it is problematic to ascribe these items as made by plantation slaves, Creoles or other coastal peoples, it was chosen to use the term "Surinamese" in the tables, Appendices B and C, which can indicate all three possibilities.

4.4.2 Bowls

The bowls are made from calabashes cut through the stem resulting in two calabash pieces which are decorated on the interior by women (Price and Price 1980, 151). Saramaka Maroons call calabash bowls *kúya*, which is probably derived from the Brazilian Tupi word *kuia*. This word is likely to be overheard directly from tropical forest Amerindians, or Brazilian slave masters and coastal slaves (Price 1993, 94; Price and Price 1980, 219; 1999, 322). The different sizes serve different purposes (Price and Price 1980, 151): (1) small and sparsely decorated calabashes are used to give babies water to drink. (2) *Bebé wáta kúya* are round medium sized decorated bowls used as water-drinking bowls, and are served during men's meals. (3) *Wási máu kúya* are elongated medium sized decorated bowls to rinse hands after dinner (Price 1993, 90; Price and Price

1980, 151). (4) *Wási alísi kúya* are larger bowls with simple decorations used as rice-washing bowls. (5) *Wási uwíi kúya* are large undecorated bowls used during rituals (Price 1993, 90; Price and Price 1980, 151; 1999, 206).

The round bottomed bowls can be placed on rings made from calabash to make the bowls stand up (also used for containers) (Dark 1954, 33; Price and Price 1980, 152; 1999, 207). The outer surface of these rings would be decorated (Dark 1954, 33). Besides, these rings known from museum collections are also made from pottery and wood and are in principal not used for several decades (Price and Price 1980, 217). Furthermore, it must be clearly stated that calabashes used during men's meal, like water-drinking and hand-washing bowls, are elaborately carved and serve to compete over one man by his wives (Price 2003, 21).

Muntslag presented four categories of bowls: (1) the *wasi* and *wasi-dede krabasi* are both large enough to contain a lot of water and are used as washing bowl (*wasi* means wash), or to wash and balm a deceased person (*dede* means dead). If the bowl is used for one specific purpose, it cannot have another purpose. (2) *Dringi krabasi* are used as a drinking bowl, and can have different sizes varying from 10 till 20 cm. (3) *Atita krabasi* are made from small pear shaped calabash fruit. When the fruit is cut through the stem it creates two halves with a spout like shape and is very useful to give food or medicine to babies, especially when the baby has cramps (*atita* - sour). (4) *Kaseer krabasi* are used for special rituals (*kaseer* means sterilisation) and according to Muntslag these are made from the same calabash variant as the *dringi* and *atita krabasi* (Muntslag 1979, 123-124). If this means that the *dringi* and the *atita krabasi* are made from the same shaped calabash is unclear. It is stated quite clearly by Muntslag that the *atita krabasi* had a pear shape, which creates a spout like shape, whereas the *dringi krabasi* has different sizes, maybe even different shapes. However, the *kaseer krabasi* can vary in size and shape. The bowl categorization of Muntslag and Price can be simplified to the unspecific ovate hemisphere categorisation of Dark (Dark 1951, 57, 59; 1954, 32).

Another category observed in the collections are painted calabash bowls which only served as decoration bowls. These will be discussed in paragraph 4.6.1. All bowls in the Suriname collection of the National Museum of Ethnology and some examples of Stichting Surinaams Museum can be found in table 3, Amerindian objects are left out.

4.4.3 Spoons, ladles, and rice mounders

The last category is the one of the spoons, ladles, and rice mounders, which are made by cutting a calabash through the stem in more than two pieces or by re-using an old and broken calabash cup. Women decorate these objects on the interior (Price 1993, 89; Price and Price 1980, 151; 1999, 207), and this decoration is similar to the decoration on the

interior surface decoration of the bowls. The Saramaka Maroons use the word *kuyêè* for calabash spoons, which is probably derived from the Portuguese word *colher*. The eastern Maroons call this object category *supun*, probably from the English word *spoon* which has its origin from the English plantation owners at the coast (Price 1993, 94; Price and Price 1980, 219; 1999, 322). In this category can be distinguished: (1) *pikí kuyêé* which are small spoons used for eating; (2) *lalú kuyêè* are medium sized spoons used for daily cooking; (3) *gaán kuyêè* are large ladles used for community cooking; (4) *angú kuyêè* are shallow oval rice mounders used to scoop out rice and to serve it in a nice shape (Price 1993, 90; Price and Price 1980, 151-152; 1999, 207).

Muntslag states that spoons are not made from large calabashes, as the shell can easily break and therefore categorises the objects according to: (1) *spoen krabasi* are made from small to middle sized fruits (*spoen* means spoon); (2) *angoe-kwi krabasi* are made from a large fruit and are not suitable as spoon (*angoe* means food, whereas *kwi* means ladle). The fruit cut through the stem, and each piece is vertical cut through the middle and the ends are rounded, usually used to scoop rice on plates. In some villages the older women use old *angoe-kwi krabasi* as a tool during labour (Muntslag 1979, 126). The *spoen krabasi* are comparable to the various spoons and ladles mentioned by the Prices, whereas the *angoe-kwi krabasi* are comparable to the rice mounder mentioned by the Prices. Dark refers to spoons only as spherical intercept (Dark 1951, 57, 59; 1954, 32).

While observing the calabash spoons of the Suriname collection in the National Museum of Ethnology (table 4), it was noticed that both small and large spoons exist, which is in contradiction to the opinion of Muntslag who assumed that calabash spoons are not made of large calabashes. Also Price (1993, 90) mentions the existence of large spoons, so-called *gaán kuyêè*. It may be clear that there is a wide range of different sizes of calabash spoon available in museum collections.

4.4.4 Musical instruments

There are various musical instruments which were introduced by African slaves to the Caribbean islands and the American continent. An eighteenth century calabash banjo made by an African slave was collected by Stedman before 1772 in Suriname (Epstein 1995, 163; Price and Price 1979, 131; 1980, 183; 1999, 263-264), and is nowadays part of the collection of the National Museum of Ethnology (360-5696, Appendix B). The banjo was used during *kalendas*, which are large gatherings of slaves with dance and music performed with instruments like drums and the banjo (Epstein 1973, 70-71; 1977, 30). It is assumed that the banjo comes originally from Africa and that it spread over the Caribbean islands and the American continent as a result of the slave trade (Epstein 1975,

359; Heiser 1979, 200). A second reason is the early banishment of drums and wind instruments which dominated the African music as these were thought to serve as signalling devices (Epstein 1975, 351). The banjo of the National Museum of Ethnology is made from a calabash covered with sheepskin and strung with four strings: one short thick string (bass string) and three long strings. The instrument is known as the "Creole-bania" (Epstein 1995, 163). If one uses a calabash as sound box for the banjo it becomes clear that this instrument cannot have fixed dimensions, as a calabash varies in size and to a lesser extent in shape. The body can also be made of wood and a skin is needed to cover the body, whereas the strings can be made of guts or vines, and the numbers can vary from one to six (Epstein 1975, 349). With regard to the "Creole-bania" collected by Stedman it is often falsely stated that this instrument is made from a gourd, whereas it is actually made from a calabash. However, it cannot be ruled out that American banjos were made from gourds, as this is the fruit which was available in Africa.

At times when the slavery was not yet abolished, drums previously made of wood and skin were replaced by calabash drums (Objects 3975-3b and 3975-3c, Appendix B). The sound these instruments created did not betray the activities of the slaves when they held their *winti-pré*. A *winti-pré* is a gathering where a person is treated with ritual actions in order to cure him from spirits or *winti*. The calabash drum produces less sound as the calabash half was placed in a bucket with water with the hollow side downwards and two sticks were used to produce sound (Wengen 1967, 20-21). This instrument would be known as *godo*, and it is stated that the largest serves as container of the water in which the other one floats and played with sticks (Ketwaru 1990, 27), however in this thesis they will be known as "calabash drums". The example known in the National Museum of Ethnology consists out of two decorated calabash bowls (objects 3975-3b and 3975-3c) and a washtub (3975-3a) which forms together the calabash drum. Indeed Wooding refers to an instrument called *godo* made of a calabash or a melon like fruit named *apatij* of which water vessels or *godo* were made (Wooding 1979, 226). These *godo* made of half calabashes or *apatij* were put with the hollow side down in a *tobo* (*tobo* is water in Ewe), a wooden water reservoir. They were played with wooden sticks or *kula* (Wooding 1979, 266). It is probable that Wooding not only refers to calabash bowls, but also to bottle gourds. According to Wooding is the origin of this instrument Dahomey in Africa (Wooding 1979, 267).

The calabashes are also used as other musical instruments, and they were used by slaves, Creoles, and Maroons (Epstein 1973, 65; Wengen 1967, 20). Among the Creoles the calabash rattles are named *sakka* (Ketwaru 1990, 27; Olsen 1998, 505; Wengen 1967, 20; Wooding 1979, 265), or *sacca sacca* (Price and Price 1979, 134), although they are also known as *shak-shak* (Crowley 1958, 112). According to Wooding this instrument is

made of a calabash fruit with a wooden handle, and maize kernels which create sound when the musical instrument is shaken. It can be found in Africa among the West-Bantu and tribes from Guinea. Among the Yoruba it is called *sêkêrê* and in Ghana in the Ewe language *xatse* or *axatse* (Wooding 1979, 265). The small calabashes used as a rattle by Maroons accompany drum choirs during specific rituals, e.g. rituals of the snake god, forest spirit, and warrior god (Price and Price 1980, 182; 1999, 207, 260). The calabashes used for rattles are completely boiled, after which a stick is put through a hole to loosen the inner pulp of the fruit (Price 1993, 88). An example of a rattle is object 360-1602 which was collected by F.A. Kühn, M.D. Surgeon General of the Colony of Suriname who collected 34 objects. It is assumed that this rattle is from a dance society or *Doo* of free Negroes and/or slaves. It belongs to the *Lobi Doe* or love dance society (Price and Price 1979, 124, 134-135). This rattle is decorated with engravings and *pemba dotti*. All musical objects of Maroon, Creole and Surinamese origin can be found in table 5, and Appendix B and C.

4.4.5 Other purposes

As was mentioned before, calabash rings are used to place round calabash bowls and containers on. However, from the following enumeration it becomes clear that the calabash has an important place during birth and death, where it is interwoven with ritual and medicinal purposes, and that not only the fruit as such is used, but also its leaves, seeds and pulp. Different activities come with the use of specific calabash objects: (1) during a difficult birth a *gaán kúya* calabash, which produces large fruits with a thick shell, is smashed with a pestle on the floor. The baby is rubbed over with the inner pulp, and all the shell fragments are smashed until they are completely destroyed. (2) During a normal child birth the inner pulp of a calabash is smeared on a woman to stimulate her contractions (Price and Price 1999, 207); but the (3) pulp is also used to treat wounds, eczema, skin fungus, tropical ulcers and scabies (Andel and Ruysschaert 2011, 119). (4) During child birth an old *angoe-kwi krabasi*, or rice mounder can be used as tool (as mentioned in paragraph 4.4.3) (Muntslag 1979, 126). (5) During a Saramaka funeral stage the calabash is smashed in a similar way as mentioned before with the birth (Price 1993, 90; Price and Price 1980, 152; 1999, 207) and (6) a similar ritual is described as separation ritual (Andel and Ruysschaert 2011, 120). (7) During ritual bathing a calabash bowl is used. A calabash cup is always preferred above a plastic cup. During these ritual bathings (8) the leaves of the calabash tree are used as ingredient of the mixtures (Andel and Ruysschaert 2011, 119). (9) A small shrine is made by placing a calabash bowl in a forked stick, which is set in the ground (fig 12). This shrine is known as *lembe* and serves to keep snakes and other evil spirits at a distance from the gardens and to assure the

growth of the crops (Andel and Ruysschaert 2011, 119-120; Price 1993, 90). (10) Calabash trees are often located next to the shrines of ancestors (Andel and Ruysschaert 2011, 120). (11) During divination, for example when a person's soul is lost, a special head-carrying calabash bowl is used to retrieve the soul from the river, the place where the soul goes during shock (Price 1993, 90-92). (12) During the treatment of illnesses, for example in the case of chest pain, which among Saramakas is known as "fallen heart", the treatment is performed with the help of a small calabash disk made from a ripe calabash cleaned and dried in the sun. Rum together with corn silk (so-called stigma of the corn flower) is put into it, and it is lit and put against the chest, where it remains for a day (Price 1993, 90; Price and Price 1980, 152; 1999, 207). (13) A calabash cup with water and molasses is used by sprinkling the substance on the soil or against a tree to pacify the spirits of the sugarcane mills which are thought to haunt the old plantation areas. Molasses is syrup of the sugarcane and has a symbolic value, as it is related to slaves and wage labourers who had to work on the sugar cane plantations (Andel *et al*. 2007, 360). The (14) juice of a young fruit is used in recipes against colds, asthma, bronchitis, pneumonia, and palpitations, whereas the leaves are used to treat burn wounds or as ingredient of ritual baths (Andel and Ruysschaert 2011, 119). (15) Another medicinal use of the calabash is the *kopoe krabasi*. This object is quite small and is made from the smallest kind of calabash fruits. The skin of person with a body swelling will be cut and alcohol is put in the small calabash, which is warmed and placed against the cut swollen spot. Pressure will rise in the calabash, which causes the septic matter to be sucked from the wound. A similar object is used among Amerindians and is described in paragraph 5.3.10. (16) Another use of this object is as a sniffing box (Muntslag 1979, 124). The last object encountered which is not mentioned elsewhere is object 399-52 (Appendix B) (15) an ash tray made of calabash and wood.

Figure 12. Left: in the foreground an example of a small shrine of a calabash bowl in a forked stick, garden camp on the Upper Pikilio 1968 (Price and Price 1999, 24). Right: calabash shrine with herbs on a garden camp, Marchallkreek, Brokopondo (Andel and Ruysschaert 2011, 120).

Calabash containers							
Accession number	**Culture**	**Type**	**Engraved**	**Incised**	**Painted**	**Pembadotti**	**Not decorated**
360-7070	S	bk	•			•	
360-7071	S	bk	•			•	
360-7074	S	bk	•				
360-7075	S	bk	•				
370-370	M	cbc	•				
370-371	M	cbc	•				
370-372	M	cbc	•				
370-373	M	cbc	•				
370-374	M	cbc	•				
370-375	M	cbc	•				
370-379	S	c	•				
370-521	S	bk			•		
370-522	S	bk			•		
399-47	S	bk		•	•		
399-48	S	bk		•	•		
399-49	S	bk			•		
399-51	S	bk		•			
399-51	S	bk					
427-46	S	c	•				
536-30	S	bk		•			
951-23	M	bk	•				
1817-250	M	cbc	•				
2452-653	M	cb	•				
2452-654	M	cb	•				
2452-655	M	cc	•				
2452-688	M	cb	•				
2452-689	M	cb	•				
2452-670	M	cc	•				
2535-23	S	cbc	•				
2535-25	S	cbc					•
2535-26	S	cbc					•
2535-27	S	cbc					•
2535-30	S	cbc	•				
3975-14a	M	cb	•				
3975-14b	M	cc	•				
3981-35a	M	cc	•				
3981-35b	M	cb	•				
4172-21a	M	cb	•				
4172-21b	M	cc	•				
5900-2	M	cc	•				
5900-3	M	cb	•				

Table 2. Overview of the calabash containers of the National Museum of Ethnology in Leiden by culture (M = Maroon, S = Surinamese), type (bk = basket, c = container, cb = container bowl, cc = container cover, and cbc = container bowl and cover), and by decoration. All objects can be found in Appendix B. Containers of Amerindian origin are discussed in Chapter 5.

Calabash bowls									
Accession number	**Culture**	**Type**	**Engraved**	**Incised**	**Pyro-engraved**	**Painted**	**Pemba dotti**	**Varnished**	**Not decorated**
234-1	S	d				•			
360-7077	S	b	•						
360-7078	S	b	•						
360-7079	S	b	•				•		
360-7081	S	b	•				•		
360-7082	S	b	•				•		
360-7083	S	b	•						
360-7084	S	b	•						
370-376	M	b	•						
370-377	M	b	•						
370-378abc	M	b	•						
370-380	S	d	•						
370-523	S	d				•			
399-43	M	b	•						
399-44	M	b	•						
399-53	S	d				•			
427-43	S	d				•			
536-27	S	d				•			
536-28	S	d				•			
536-29	S	b							•
951-14	M	b	•						
951-15	M	b	•						
951-16	M	b	•						
951-17	M	b	•						
951-18	M	b	•						
951-19	M	b							•
951-20	M	b	•						
951-21	M	b	•						
951-22	M	b	•						
1053-7	S	b	•						

Accession number	Culture	Type	Engraved	Incised	Pyro-engraved	Painted	Pemba dotti	Varnished	Not decorated
1053-8	S	b	•						
1053-9	S	b	•						
1053-10	S	b	•						
1053-11	S	b	•						
1053-12	S	b	•						
1054-7	M	b	•						
1354-79	S	d				•			
1354-80	S	d				•			
1354-81	S	d				•			
1354-83	S	d				•			
1749-3	S	d				•			
1749-4	S	d				•			
1749-5	S	d				•			
1749-6	S	d				•			
1749-7	S	d				•			
1749-8a	S	b							•
1749-8b	S	b							•
1749-9	S	b							•
1752-55	S	d				•			
2452-656	M	b	•						
2452-657	M	b	•						
2452-658	M	b	•		•				
2452-659	M	b	•						
2452-660	M	b	•						
2452-661	M	b	•						
2452-662	M	b	•						
2452-663	M	b	•						
2452-664	M	b	•						
2452-665	M	b	•						
2452-666	M	b	•						
2452-692	S	d	•		•				
2452-693	S	d	•		•				

Accession number	Culture	Type	Engraved	Incised	Pyro-engraved	Painted	Pemba dotti	Varnished	Not decorated
2452-693a	S	d	•		•				
2452-693b	S	d	•		•				
2452-694	S	d	•		•				
2452-694a	S	d	•		•				
2452-694b	S	d	•		•				
2452-695	S	d	•		•				
2452-696	S	d				•			
2452-697	S	d				•			
2452-698	S	d				•			
2452-699	S	d				•			
2452-700	S	d				•			
2452-701	S	d				•			
2452-702	S	d				•			
2452-703	S	d				•			
2452-704	S	d				•			
2452-705	S	d				•			
2535-24	S	b	•						
2535-28	S	b							
2535-29	S	b							
2535-31	S	b		•					
2777-31	M	b	•						
2777-32	M	b	•						
2777-33	M	b	•						
2777-34	M	b	•						
2777-86	S	d				•			
2777-87	S	d				•			
3975-19	M	b	•						
3981-22	S	d	•			•			
3981-34	M	b	•						
4015-1	S	d	•			•			
4015-2	S	d	•					•	
4031-2	M	b	•						

Accession number	Culture	Type	Engraved	Incised	Pyro-engraved	Painted	Pemba dotti	Varnished	Not decorated
4172-22	M	b	•						
4172-23	M	b	•						
5006-11	M	b	•						
5006-12	M	b	•						
5006-13	M	b	•						
5900-4	M	b	•						
5900-5	M	b	•						
5900-6	M	b	•						
5900-7	M	b	•						
5900-8	M	b	•						
5900-9	M	b	•						
5900-10	M	b	•						
5900-11	M	b	•						
5900-12	M	b	•						
5900-13	M	b	•					•	
5900-14	M	b	•						
5900-15	M	b	•						
5900-16	M	b	•						
SSM-4-75	C	d	•						
U-1	U	b	•	•					
U-2	U	b	•						
U-3	U	b	•	•					
U-4	U	b	•	•					
U-5	U	b			•				

Table 3. Overview of the calabash bowls encountered in the collection of the National Museum of Ethnology in Leiden and the Stichting Surinaams Museum in Paramaribo by culture (C = Creole, M = Maroon, S = Surinamese, U = unknown), use (b) bowl or (d) bowl for decoration, and the decoration method. All objects can be found in Appendix B and C.

Calabash and gourd spoons						
Accession number	**Culture**	**Species**	**Engraved**	**Pyro-engraved**	**Painted**	**Not decorated**
360-7095	S	L	•		•	
360-7098	S	L	•		•	
360-7100	S	L	•		•	
360-7101	S	L				•
360-7102	S	L				•
370-381a	M	C	•			
370-381b	M	C	•			
370-381c	M	C	•			
370-381d	M	C	•			
370-381e	M	C	•			
370-381f	M	C	•			
370-381g	M	C	•			
370-381h	M	C	•			
370-381i	M	C	•			
370-381j	M	C	•			
370-381k	M	C	•			
370-381l	M	C	•			
370-381m	M	C	•			
370-381n	M	C	•			
370-381o	M	C	•			
370-381p	M	C	•			
370-381q	M	C	•			
399-45	M	C		•		
399-46	M	C	•			
951-24	M	C	•			
951-25	M	C	•			
951-26	M	C	•			
951-27	M	C	•			
2452-671	M	C	•			
2452-672	M	C	•			
2452-673	M	C	•			
2452-674	M	C	•			
2452-675	M	C	•			
2452-676	M	C	•			
2452-677	M	C	•			
2452-678	M	C	•			
2452-679	M	C	•			
2452-680	M	C	•			
2452-681	M	C	•			
2452-682	M	C	•			
2452-683	M	C	•			
2452-684	M	C	•			
2452-685	M	C	•			
2452-686	M	C	•			
2452-687	M	C	•			
2452-688	M	C	•			
2452-689	M	C	•			
2452-690	M	C				•

Accession number	Culture	Species	Engraved	Pyro-engraved	Painted	Not decorated
2452-691	M	C	•			
2777-18	M	C	•			
2777-19	M	C	•			
2777-20	M	C	•			
2777-21	M	C	•			
2777-22	M	C	•			
2777-23	M	C	•			
2777-24	M	C	•			
2777-25	M	C	•			
2777-26	M	C	•			
2777-27	M	C	•			
2777-28	M	C	•			
2777-29	M	C	•			
2777-30	M	C	•			
3975-13b	S	C				•
3981-16	M	C	•			
5006-14	M	C	•			
5660-11a	M	C	•			
5660-11b	M	C	•			
5660-11c	M	C	•			
5660-11d	M	C	•			
5660-11e	M	C	•			

Table 4. Overview of the calabash spoons of the collection of the National Museum of Ethnology in Leiden by culture (M = Maroon, S = Surinamese), and the decoration method. Note that both calabash spoons, as well as bottle gourd spoons are included. All objects can be found in Appendix B.

Calabash and gourd musical instruments								
Accession number	**Culture**	**Species**	**Type**	**Engraved**	**Incised**	**Paint**	**Pemba dotti**	**Adapted culture**
360-1602	S	C	rattle	•			•	Creole
360-5696	C	C	banio		•			
360-7048	S	C	rattle		•			
1053-14	S	L	rattle					
2363-95	MN	C	rattle					
2363-96	MN	C	rattle				•	
2363-97	MN	C	rattle				•	
2452-710	S	L	natural dried rattle					
2452-711	S	L	natural dried rattle					
2452-712	S	L	natural dried rattle					
2452-713	S	L	natural dried rattle					
2452-714	S	L	natural dried rattle					
2452-715	S	L	natural dried rattle					
2452-521	M	C	rattle	•				
2452-723	S	L	musical bow					Maroon
3971-1a+b	M	C	rattle					
3975-3b	C	C	calabash drum	•				
3975-3c	C	C	calabash drum	•				
3981-21	S	L	natural dried rattle					
4045-1	MN	L	musical bow					
5006-8	M	C	rattle	•				Toerisme Suriname
5006-9	M	C	rattle	•				Toerisme Suriname
5006-10	M	C	rattle	•				Toerisme Suriname
5006-15	M	L	natural dried rattle					
5379-50	C	C	rattle	•				
5715-1744	S	C	rattle	•	•	•		Toerisme Cuba
5715-1745	S	C	rattle	•	•	•		Toerisme Cuba
5900-1	M	C	rattle	•			•	

Table 5. Overview of musical instruments from the National Museum of Ethnology in Leiden, by culture (C = Creole, M = Maroon, MN = Maroon Ndjuka, S = Surinamese), species (C = *Crescentia cujete* or L = *Lagenaria siceraria*), type of musical instrument, decoration method and adapted culture when necessary. Amerindian musical instruments are discussed in Chapter 5. All objects can be found in Appendix B.

4.5 The bottle gourd

The bottle gourd is known among Saramaka Maroons as *gólu* (Price 1982, 74), *kágo gólu* which is a large round bottle gourd, and the *tatái gólu* (*liaankalebas*) which is a small variant (fig 13) (Andel and Ruysschaert 2011, 182-183). In Sranantongo the bottle gourd is known as *godo* (Yamada 2010, 802, 903), *pun*, *papagodo* (or watervessel, whereas 'papa' refers to the slaves from Grand Popo in Benin), *tingigodo* (*stinkkalebas*) or *golu* (Andel and Ruysschaert 2011, 182-183; Bruijning and Voorhoeve 1977, 206). As mentioned before (paragraph 2.1) two cultivars are known in Suriname: a small bottle shaped gourd known as *papagodo*, and a large round one known as *kágo gólu* (Andel and Ruysschaert 2011, 182). *Papagodo* (Sranantongo) is probably the variant comparable to the *tatái gólu* (Saramaccan), as it is also small and bottle shaped according to fig 13. The bottle gourd is compared by Muntslag to a watermelon, which refers to the plant family (paragraph 2.1). Muntslag makes a distinction between the calabash and gourd, where the calabash is referred to as a fruit of a fruit tree (Muntslag 1970, 20).

Bottle gourds are used among the Maroons. These fruits are grown by Maroons in both the villages as well as in the horticultural camps and when ripe the fruits are picked from their vines. However, the following phase of preparation depends on the purpose of the object (Andel and Ruysschaert 2011, 182; Price and Price 1980, 164).

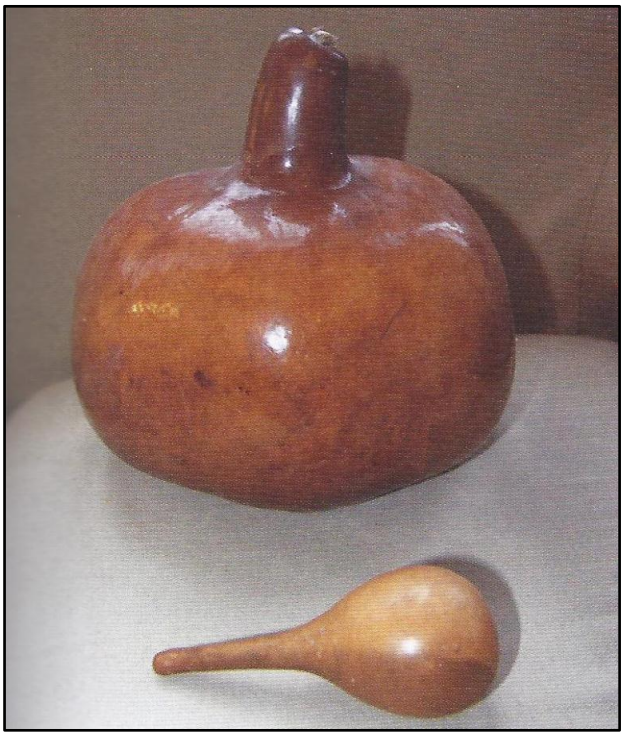


Figure 13. Two variants of the *Lagenaria siceraria* which are common in Suriname: the large round one is the *kágo gólu* and the smaller one is known as the *tatái gólu* or *liaankalebas* (Andel and Ruysschaert 2011, 183).

4.5.1 Containers

The container bottle gourds are picked from the vine, after which they are rotted out by placing them in a creek for several weeks. A hole is made in the stem, after which the seeds are removed (Price and Price 1980, 164). In paragraph 2.1 it was mentioned that the practise of placing the fruit in water was to leach out the bitterness in order to maintain the taste of the liquid. These kinds of bottle gourds are often used as water vessels (Price and Price 1980, 164-165). For this purpose the *papagodo* variant is used, as it keeps the water cool (Andel and Ruysschaert 2011, 182). Bottle gourd containers are widely seen as household object before the introduction of plastic or metal buckets. Nowadays, they are still made and used for ritual purposes in which it is not appropriate to use modern buckets. These objects are never decorated with carvings (Price 1982, 79-80; Price 1993, 93; Price and Price 1980, 164-165).

The use of the gourds by Maroons is traceable to the period when plantation slaves ran away. In order to have clean drinking water during the flight into the forest they used bottle gourds as water vessels. According to Muntslag (1979, 20) the stem of the gourd would be cut in triangles, which creates a typical pattern of cutting around the mouth of the gourd. A pod would be used to close the water vessel. This typical cutting, which is very different from the normal opening, is known as *kago boeka* or "tooted mouth" opening and can also be recognised in the decoration on houses (Muntslag 1979, 20, 22). However, no water bottles were encountered with this kind of opening while studying the museum collections. As was mentioned before, there exists a small bottle-shaped bottle gourd known as *papagodo* of which the name would refer to the slaves from Grand Popo in Benin (Andel and Ruysschaert 2011, 183). This confirms the theory of Muntslag that the use of the bottle gourd can be traced back to the African slaves which are the ancestors of the Maroons. It is not unthinkable that the plantation slaves knew thisfruit from the plantations, as also the calabash tree was grown along the walkways through the plantations (Kappler 1854, 53; Rolander 2008, 1308). The water vessels used by Maroons in the Suriname collection of the National Museum of Ethnology in Leiden can be found in table 6. Only object 3981-33 is decorated with compass engravings which gives the impression that decorating water bottles made out of bottle gourds was rather an exception. The object known as U-9 in Appendix C has a black rim, it can be assumed that this is paint, and given the other objects and the knowledge about liquid containers this is rather another exception in decoration.

Bottle gourd and calabash containers				
Accession number	**Culture**	**Species**	**Engraved**	**Painted**
74-196	Surinamese	L		
360-7103	Surinamese	L		
360-7131	Surinamese	L		
581-36	Maroon	L		
581-37	Maroon	L		
951-10	Arawak	L		
951-11	Arawak	L		
951-12	Arawak	L		
951-13	Arawak	L		
1817-192	Kari'na	C	•	•
1817-199	Kari'na	L		
1817-200	Kari'na	L		
2452-707	Surinamese	L		
2452-708	Surinamese	L		
2452-709	Surinamese	L		
3981-33	Surinamese	L	•	
U-7	Surinamese	L		
U-8	Surinamese	L		
U-9	Surinamese	L		•
U-10	Surinamese	L		
U-11	Surinamese	L		

Table 6. Overview of the containers made of the *Lagenaria siceraria* (L) and *Crescentia cujete* (C) from the Suriname collection of the National Museum of Ethnology in Leiden and the Stichting Surinaams Museum in Paramaribo by culture and decoration. All objects can be found in Appendix B and C.

4.5.2 Musical instruments

Furthermore, the bottle gourds are used as the sounding box as part of a stringed instrument which is called the *gólu-bèntá* (gourd *bèntá* or *agbadó*). *Bèntá* derives from the West African word for "musical bow" in Twi and Ewe. These objects are also known in Jamaica and Curaçao (Katweru 1990, 27; Price and Price 1980, 164, 182; 1999, 325). Three wooden bows are inserted through a gourd which is cut lengthwise, and a string is attached to the bow at both ends. The instrument is held between the knees and the strings are plucked by the fingers. Nowadays, this instrument is no longer used among the Saramaka, but it is still in use among the Aluku. It shows the ties between the Maroons and their African heritage: the form, association with forest spirits and cultural sound are similar to the African variants. However, the material used, spirits and rhythms played are typically Maroon (Price and Price 1980, 182, 221; 1999, 262-263), and show adaptation to the environment in the New World. There are two musical bows in the Suriname collection of the National Museum of Ethnology in Leiden (table 5: 2452-723 and 4045-1, Appendix B). It can be assumed that these objects were not decorated as this is not mentioned in the literature, and neither observed from the museum objects. Furthermore,

natural dried variants of the bottle gourd are used as children's rattle, or during *Winti* rituals (Andel and Ruysschaert 2011, 182). Several examples are known from the Suriname collection of the National Museum of Ethnology in Leiden and can be found in table 5, but it is not certain if these objects were used for this purpose.

4.5.3 Other purposes

Other purposes of the bottle gourds are those as (1) rolling pins, which are dried uncut and are used in combination with wooden grinding boards. Roasted peanuts are ground on these boards to create a smooth paste, which is used in many dishes (fig 14). However, wooden variants can replace the gourd rolling pins (Price and Price 1980, 99, 164; 1999, 136). There are two examples known in the National Museum of Ethnology in Leiden which could be ascribed as rolling pins, especially if one considers that both objects have use marks (objects 2452-716 and 2452-717, Appendix B). Other bottle gourds are used for (2) ritual purposes and are decorated with soot and juice of red berries and are displayed in house shrines. Furthermore, the use as (3) masks during funeral rites, and (4) children's dolls can be mentioned. Also (5) tiny rings of the stem from gourds are tied around the ankles of young children in order to ensure progress in learning to walk (Price and Price 1980, 164-165). The seeds, leaves, and shell of the bottle gourd are known to be used for (6) medicinal purposes and are used during (7) rituals (Andel and Ruysschaert 2011, 182-183). (8) Another category discovered in the collection of the National Museum of Ethnology are the spoons made of bottle gourds (table 4). These are made of a bottle gourd cut through the length in half and are sometimes decorated with engravings, filled with black dye.

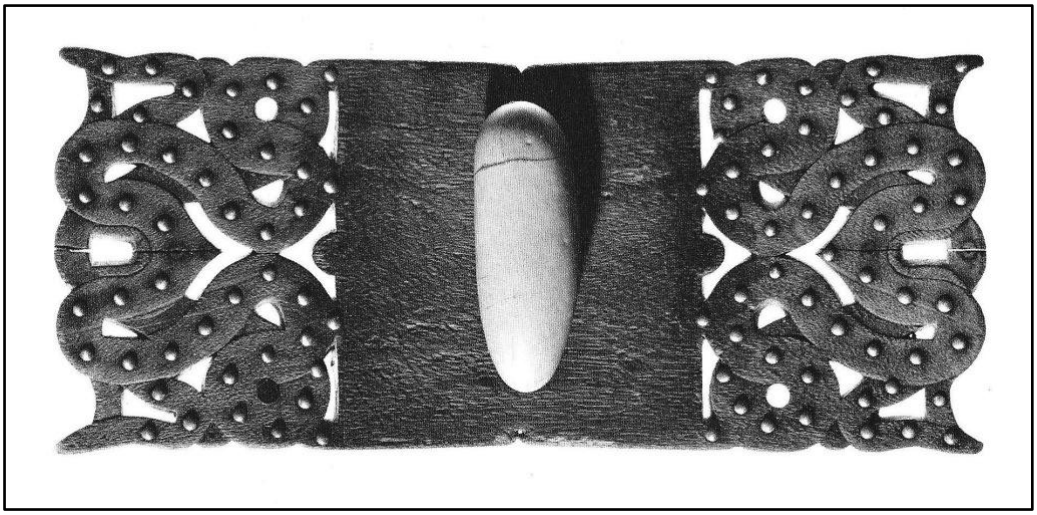


Figure 14. An example of a wooden peanut-grinding board with gourd roller, Upper Gaanlio c. 1900, private collection (Price and Price 1980, 138).

4.6 Decoration

The Maroon's daily life is influenced by the fact that art is considered of great importance to all, and that anyone can be considered as an artist. So, before going into detail about calabash decoration, some general remarks about Maroon art and its influence on daily life will be explained.

(1) Aesthetic considerations influence all the different areas of Maroon life. This can be noticed over a wide scale of graphic and visual arts: in their wood and calabash carving, their painting, carving of metal objects, in their clothes from textiles to embroidery, but also their beadwork, calf bands, hairdos, body cicatrisation, to the decoration of manioc bread. It can also be noticed in the performing arts like dances, singing and playing musical instruments, the usage of language, like folk tales, prayers, and jokes. There exists a wide scale of performing art expressions and these are all influenced by aesthetic considerations (Price and Price 1980, 35-36; 1999, 39).

(2) Artistic expression of any kind is supposed to be carried out by all adults. In contradiction to the African standardization of trained artists, it is expected that all the adult Maroons actively create art. Although specialist artists exist, and are admired for their work, everyone is expected to make art and children will take part in different media from an early age (Price and Price 1980, 36, 38; 1999, 40). Calabash carving is an individual specialization, as not everyone is assumed to make nice calabash decorations. Therefore, women who are prized for their designs are asked by others who do not have this artistic skill to design or even carve their calabashes. Women who are seen as expert carvers are modest and often state that they are beginners at carving (Price 1993, 104, 107-108).

(3) All Maroons, even artists, take part in the discussions about all kind of art expressions and what is considered aestheticly pleasing (Price and Price 1980, 36; 1999, 40). Interesting to notice is that not only Maroon objects are discussed for their aesthetic value, but also western objects are bought and discussed because of their aesthetic value to the buyer, and they serve even as inspiration for other art expressions (Price and Price 1980, 36, 38; 1999, 42).

(4) Art specialization is gender differentiated as men are specialised in woodcarving, whereas women are focused on textiles and calabashes. Even when an object is decorated by both genders, there exists specialisation in style: designs of men are geometric, angular and symmetric, and in contradiction, women make more curvilinear and free-form patterns. This can be clearly seen on calabashes (Price and Price 1980, 36; 1999, 40).

(5) The social context of art or artistic expression is considered valuable, this is evident in discussions about aesthetics in which the Maroons always remark on the generational, regional and the individual situation, moreover they will mention the creator, the receiver and the reason to receive. So, the context of art is of great importance (Price and Price 1980, 40, 42).

(6) Art is also part of reciprocity. The gifts or services are given or done to assure or maintain relationships, where immediate repayment is a way of saying thanks. Relationships like friendships, ritual clientele, to ties of kinship and marriage are in this way maintained and reassured (Price and Price 1980, 42; 1999, 45-46).

(7) Courtship between men and women show a greater extent of reciprocity. It is evident in the art of woodcarving, sewing and calabash decoration. Especially the Saramakka see all these activities as courtship, whereas the eastern Maroons explain some designs as sexual symbolism (Price and Price 1980, 42-43; 1999, 46-48). According to Muntslag the decoration made by women can be regarded as an expression of her feelings toward her husband or her guests, as she serves the food in decorated calabashes (Muntslag 1979, 14-15). Woodcarving and sewing are gifts of courtship or marriage between men and women, and the calabashes play a very important role in this. The calabashes are used to present meals, to drink from or to wash the hands, and for these occasions they are elaborately decorated, not only to show a woman's skills, but also to compete with the other women for her husband. It can be concluded that these art expressions carry a sexual significance (Price and Price 1980, 43). It becomes clear that art is made not only because of standards of beauty, but it is used to maintain relationships.

(8) Money and tourism influence the Maroon art. The interest of scientists and tourists has has effected Maroon art, since the Maroons discovered that their objects can be sold in the touristic coastal areas (Price and Price 1980, 44; 1999, 50-52). For example, their has been a shift in practices, as women in order to earn more money took over the calabash decoration of men, as they went to the coastal areas for wage labour. Interesting to notice is that Maroons use books to reproduce objects. For example some Maroon carvers use the contents of books like *Afro-American Arts of the Suriname Rain Forest* (Price and Price 1980) and *Africains de Guyane: la vie matérielle et l'art des Noirs Réfugiés de Guyane* (Hurault 1970), and these objects are made for the tourist market (Price and Price 1999, 168-169). The commercial tourist market is one of the areas where calabashes are being sold, and one can wonder if these calabash objects are truly Maroon cultural heritage.

4.6.1 Decoration developments

Before the Africans were taken captive to be sold as slaves, they already knew the bottle gourd and used it. In Suriname, this plant was cultivated, but never used as an artistic medium. It is assumed that the only decorated bottle gourds are those for ritual purposes which are displayed in shrines (paragraph 4.5.3), in contradiction to Africa where the bottle gourds were decorated with carvings on the outer surface (Price 1993, 93-94). However, during the study of the museum collection it became clear that at least several objects made of *Lagenaria siceraria* are decorated with engravings on the outside. These are mostly bottle gourd spoons cut through the length after which the engravings are filled with a natural dye (fig 15 and table 4) and bottle gourd containers used as watervessel (paragraph 4.5.1). At least two objects can be categorised as artistic medium as they do not have a clear function, 360-7104 and 360-7105 (Appendix B), which are natural dried bottle gourds decorated with engravings filled in with natural dyes. According to Hureault (1979) the decoration of these two objects is comparable to the art of the Ashanti and the Dahomey. The execution of the design is more careful, whereas the designs are geometrically perfect. It shows a systematic opposition between strips of triangles and half circles, which would suggest a systematic opposition and the presence of sexual abstract symbolism among Maroons (Hureault 1979, 116). However, these objects are from the 360 series and it is possible that these objects were not made by Maroons, but by African slaves taken to the New World, or even by Africans and were ascribed as objects from Suriname.

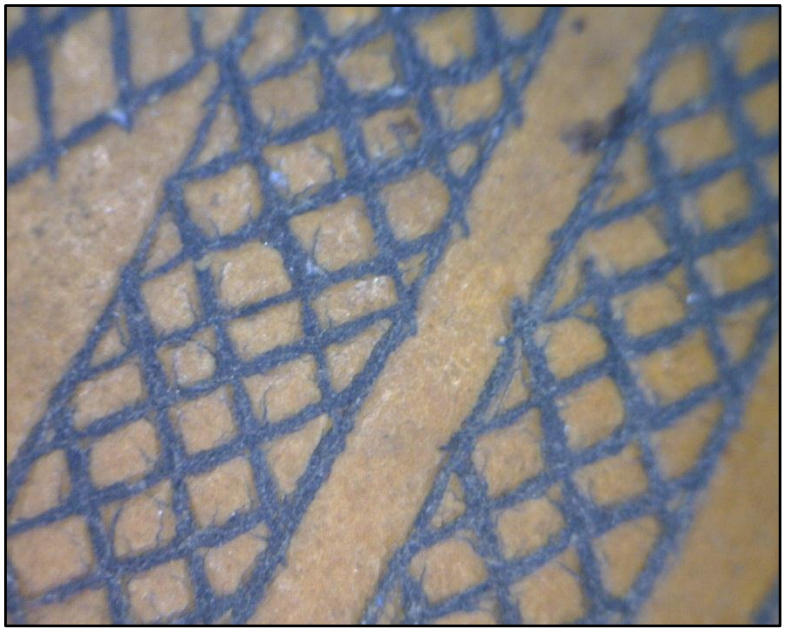


Figure 15. A detail photo of object 360-7098, a *Lagenaria siceraria* spoon. The incisions are filled with some kind of natural black dye (microscope photo by Saskia van Veen 2011).

Figure 16. A. Calabash cup H-2552, and B. powder horn H-2553 both decorated with engravings and *pemba dotti* (photos by Museum of the Tropics in Amsterdam).

In old journey records it is written that calabashes were readily accessible on plantations, as the trees were planted along the walkways of the plantations, and the shells of the *Crescentia cujete* were used by plantation slaves as utensils for their food (Rolander 2008, 1308, 1519). Until the second half of the nineteenth century the oldest known decoration style was sometimes observed in Maroon villages and consists of rosaces, geometric shapes, border designs, and animal figures which are textured by incised flecks. These carvings were rubbed with white kaolin clay. Already during the eighteenth century this decoration style was used by Afro-Surinamers who decorated the outer surface with geometric designs and kaolin clay, very similar to the decoration on gourds in West Africa (Price 1993, 94-95; Price and Price 1980, 155; 1999, 210-211; 2003, 29-30). This shows that both the plantation slaves and the escaped Maroons share their African influence, and that it is difficult to be sure about who made the object.

In the Netherlands the museum collections and the objects therein lost the relation with slavery as soon as they became part of the collections. Legêne (1998a, 386-387; 1998b, 44) gives an example of two calabashes from the Surinamica collection of Gasper van Breugel. For a long time, these objects were ascribed to the Maroons, but it is more probable that they were made by the plantation slaves of the Clifford Kocqshoven plantation. When the plantation owner Gasper van Breugel returned to the Netherlands both objects were taken from the plantation. Figure 16.A shows a calabash cup (H-2552) decorated with concentric incisions and a figurative depiction of a bird accentuated with *pemba dotti*, kaolin clay, and was found under a *kankatri*-tree (*Ceiba pentandra*) as an offering made by the slaves of the plantation. The other object shown in Fig. 16.B (H-2553) is a powder horn that was taken as a souvenir. It is a basket with a woven handle of cotton. The decoration consists of two flowerpots with plants, four birds and two angels

with trumpets. The carvings are filled with *pemba dotti*. However, these carvings are probably a reference to the plantation house and the garden of Clifford Kocqshoven. The bottom decoration has the same concentric incisions as on calabash H-2552. These two objects show the crossing between Afro-Surinamese products with western style decoration made for western use (Legêne 1998a, 386-387; 1998b, 44).

During the second half of the nineteenth century the Maroon men began using commercial tools, like compasses, to make decorations in the form of concentric arcs and circles. At the same time the women started their experimenting on the calabash interior, most often on the calabashes already decorated by their men (Price 1993, 95; Price and Price 1980, 156; 1999, 211-212; 2003, 30). This is often not documented on the photographs made of these early museum collections (Price 2003, 30). Eventually the men decorated only the covered containers, whereas the remaining was decorated by women (Price and Price 1980, 156). It is assumed that during this period, the West-African style is really transformed to the new environment.

In the late nineteenth century calabashes are recorded which are decorated with colourful paintings in the coastal style. Hearts, Dutch aphorisms, daily life, and flowers painted with commercial paints can be found and it is assumed that these calabashes were decorated by former plantation slaves. Also during this time calabashes of mixed origin are recorded: the Maroon incisions on one side, whereas the other side is decorated with coastal-style paintings. According to the Prices these calabashes are firstly decorated by the Maroons, after which the coastal people, or the former plantation slaves, decorated them. These calabashes of mixed origin can be found in souvenir shops (Price 1993, 95; Price and Price 1980, 156; 1999, 212-213) and serve as wall decorations of coastal people and tourists (Price and Price 1980, 156). During the research in the National Museum of Ethnology various objects are encountered which are from mixed origin. These differ in the above described examples, as often the engravings are painted over with for example landscapes (objects 3981-22 and 4015-1, Appendix B, table 3).

At the end of the nineteenth century two styles of calabash carvings are established. The Maroon men decorate the outside of two-piece containers with complicated geometric textured designs, with the help of their woodcarving tools, like pocket knives, compasses, and chisels. Whereas the Maroon women decorate the inside of calabash bowls in symmetrical designs with the use of glass pieces in shallow bas-relief (Price 1993, 95, 101; Price and Price 1980, 153, 156, 160; 1999, 206, 215; 2003, 30).

The shift in gender related carving, from men to women, from outside to inside, was influenced by the fact that the men went to the coastal area for wage labour, and thus were away from home a long time. So, the Maroon villages were mostly inhabited by women and children. The other factor influencing this shift was that the men were more focussed on wood carving as this had more artistic possibilities than calabash carving (Price 1993, 96). In this period more decorated ladles, with simple incisions, similar to the inside of containers can be found (Price 1993, 96). As it took some time to develop, the first examples show crude incisions (Price 1993, 99). However, nowadays the calabashes are owned by women, and the inside of the calabash is strictly decorated by women, and the men are asked to decorate them on the outside. Or another possibility is that a man marks the design of the interior decoration, after which the woman carves the decoration (Price and Price 1980, 36-37). According to Muntslag a man who decorates the inside of the calabash is regarded as a coward (Muntslag 1979, 15). However, Price (1993, 99) mentions that the Saramaka women take the opportunity of having a man set out the decoration pattern, in order to learn from him, often because the women see this particular decoration of men as superior to theirs.

In the twentieth century the decoration patterns of Maroon women shows regional diversity, which is based on figure and background. The Saramaka decoration is characterised by even-sided bands of which the darkening of the pattern is created by scraping to the inside (internal shading). The eastern Maroon (Aluku, Ndjuka, and Paramaka) decoration is characterised by the shaded effect on the outside of the band (external shading) (Price 1993, 100; Price and Price 1980, 160; 1999, 216). However, the Matawai incise linear designs without scraping the surfaces (Price and Price 1980, 220). The Saramakas make designs of even or concave shapes with the internal shading, which are narrower in the centre. The eastern Maroons produce convex shapes using external shading and the forms are bulging. It is assumed that the division between internal and external shading decoration patterns is based on a common origin, although, for now it is not clear how this developed, but certainly the background is an important part of the overall decoration (Price 1993, 100-101; Price and Price 1980, 160; 1999, 217). The Saramaka calabashes have borders scraped along the exterior rim, and the point at which the scraped bands merge is frequently closed off in carvings of downstream villages, but left open in those made elsewhere. The Aluka, Ndjuka and Paramaka calabashes do not have borders scraped into the exterior rim and are further characterised by convex externally shades. Even within the Maroon groups there exists diversity among calabash decoration: the southern Saramakas scrape borders whereas northern Saramakas do not. Furthermore, are the forms and designs of the bowl typical for the villages of origin (Price 1993, 101; Price and Price 1980, 160; 1999, 218-219).

The designs executed on calabashes can also be found on other materials. A division of calabash decoration in three parts is similarly found in the patchwork of pieces of cloths and embroidery. However, woodcarving also has its influence on calabash art, even hairstyles (Price and Price 1980, 160, 164; 1999, 219-223). The use of modern materials replaces and influences the calabash carving. The Kwinti use calabashes rarely and incise them crudely. By the 1960's, the Aluku calabashes were replaced almost completely and the Upper Saramaka use the small spoon only occasionally during rituals like burials, whereas they were previously used on a daily basis (Price and Price 1980, 220).

The latest development since 2000 in Maroon calabash art is the piercing of designs as a kind of filigree openwork at the edges of the bowls. This can also be compared to the wood working art of the Maroon men. Even the functionality is overcome and beauty is preferred, as pierced calabashes are known to decorate the walls of houses in French Guiana around 2002 (Price 2003, 31). These bowls with filigree openwork were sold during the exhibition *Kunst van overleven* in the Museum of the Tropics in Amsterdam (November 2009 till May 2010). Calabash art is still a developing art, as the following overview shows (table 7).

Calabash Decoration		
Date	**Decoration**	**Artist**
18th century till second half 19th century	Rosaces, geometric desgins, border designs, and animal figures are textured. Kaolin clay.	Afro-Surinamers and Maroons
Second half 19th century	Commercial tools, concentric arcs and circles.	Maroon men
	First experimenting on calabash interior.	Maroon women
Late 19th century	Hearts, Dutch aphorisms, daily life, and flowers with commercial paints, on Maroon calabashes: decoration of mixed origin.	Maroons and coastal people
End 19th century	Outside of two-piece containers with complicated geometric textured designs, and commercial tools.	Maroon men
	Inside symmetrical designs with the use of glass pieces in shallow bas-relief.	Maroon women
20th century	Regional diversity, based on figure and background.	Maroon women
21th century	Piercing of designs at the edges of the bowls.	Maroon women

Table 7. An overview of the Maroon calabash decoration development, with date, kind of decorations and the artists.

4.6.2 Decoration designs

Calabash decoration among the Saramaka is conceptualised in design ideals. (1) A decorated calabash bowl has an outside border as well as an inside border. The absence of an outside border indicates that the calabash is made by women of the Lower River Saramaka, whereas the absence of an inside border is only done as it is in favour of the executed design. Broad inside borders are an indication of the production by eastern Maroons. (2) Designs are executed with the scraped edges on the inside of the design which is known as "belly-to-belly" or *bêè-ku-bêè*. However, also designs exist with the scraped edges on the outside, known as the "back-to-back" or *báka-ku-báka* style. An example is the monkey's tail and turtle's penis designs (fig 18, 3-5). The "back-to-back" design is valued for its planning, because when executed wrongly it looks like an artistic error (Price 1993, 109). (3) Another ideal of the inner design is bilateral symmetry around the equator of the bowl: one half of the design towards the stem or *hédi* (head) of the bowl, and the other half to the *gogó* (rump) of the calabash bowl. According to Saramakka women symmetry is a quality which men have and not women, and as such it is hard to achieve and execute this in the decoration of calabash bowls. (4) Also the balance between the figure (*kúya pèndê gandá*) and the ground area (*kúya sinkíi*) are important. For example there are methods to improve the balance between the figure and ground area when dissatisfied about the result: adding an extra border in the first one, to reduce the emptiness around the design, or to add marks or *nômbu* (numbers) which are normally added at the outside of the calabash bowl. These marks or *nômbu* can be placed on the inside to fill an area which would otherwise be too large or too empty (Price 1993, 110).

According to Dark the decoration made by women is characterised by (1) the angular, curved or circular shape of the designs; (2) the absence of the zigzag incisions that can be found among the decoration made by men; (3) incision instead of low-relief carving. (4) The rim is not clearly marked, and the design can overflow this rim. (5) The designs may or may not fill in a specific area. (6) The designs may or may not be symmetrical, (7) and designs can be divided into segments. (8) The designs made by women are different from those made by men (Dark 1951, 59). These statements by Dark are in contradiction with above mentioned observations of Price. Dark further considers the decoration made by men as (1) intertwining and curvilinear, and (2) symmetrical. (3) The designs have to fill a surface and there exists symmetry between the design and left over space. (4) They use a zigzag motif in low relief. (5) The demarcation of the rim which is never crossed by the design. (6) A relation between design and design space. (7) The decoration is similar to those on other objects made by Maroon men (Dark 1951, 58; 1973, 32-33). Dark tries to define the differences between the two kinds of styles with the

decoration to the relationship between Maroon men and women. However, this is critised as he makes assumptions based on the interpretation of ethnographic reports which are incorrect. He puts art styles and marital behaviour together rather than evaluating it from a cultural and social setting (Dark 1951, 59; Herskovits 1951, 163-164; Price 1993, 119, 122). The assumptions made by Dark are a result of the absence of long-term research, and the time period in which the research was done (Koopman-Karg 1995, 39-40; Price 1993, 209; Price and Price 1999, 204). The difference in style between calabashes decorated by men and women are a result of the concepts which characterise Maroon art and the developments which influenced this society and their art over time (paragraph 4.6 and 4.6.1).

These ideals of decoration design are influenced by the purpose of the calabash objects. The ideals mentioned above are especially for drinking-bowls and hand-washing bowls. Rice-washing bowls are less decorated and already praised for their beauty when they are well executed: well scraped and free of surface irrigularities and their only decoration can be a simple mark on the inside of the bowl. Spoons, ladles and rice mounders or *kuyêé* are simply decorated, but when they have decoration this is similar to the decoration on the bowls, known as *kúya fási*. The most common decoration on spoons, ladles and rice mounders is the *kokóima* design (fig 18, 14-15) and is also one of the most recognised designs of objects in Appendix B (Price 1993, 112-113). The motifs on calabashes often share names with other artistic expressions (fig 18, 6-13), whereas names of designs can vary between people of the same villages, villages or even between regions (fig 18, 13) (Price 1993, 117-118). It is possible that fig 19, 5 was recognised in object 4172-23 of Appendix B.

A motif which can be found on calabash bowls and spoons according to Dark is the "bone motif" (fig 17). This motif is found on the calabash spoons and bowls at the inside as well as the outside of these bowls. Dark argues that the "bone motif" is made in both cases by men (Dark 1951, 58). However, comparing this assumption with the extensive research by Price, it can be argued that the "bone motif" on the inside of the bowl can be made by women, as they adapted it from the men.

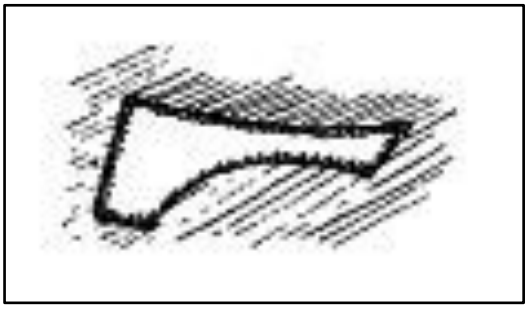


Figure 17. The "bone motif" (Dark 1951, 58).

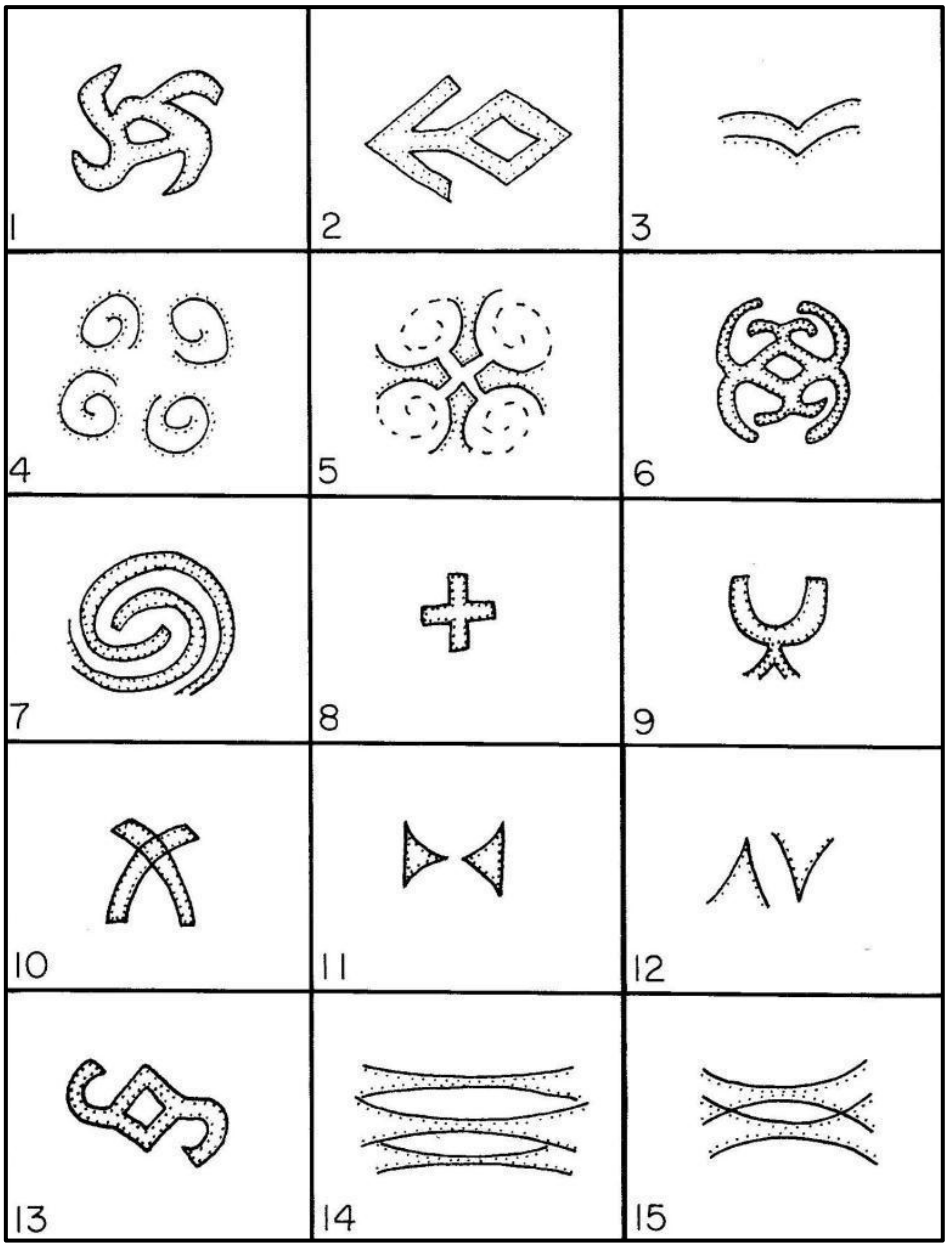


Figure 18. Examples of motifs with a name. The dots indicate the scraped away shell. 1. *akuyêé fóu* – Akuyee's bird: named after a rubber duck bought in Paramaribo. 2. *íngi piiwá* – Indian arrow: this motif is associated with the village Pempe. 3. *báka-ku-báka* – back-to-back: refers to the placement of the shading in the motif. 4. *makáku lá bu* – monkey's tail: this motif is common in the woodcarving of Saramaka Maroons around the early twentieth century. 5. *logozo pipí* – turtle's penis: the result of monkey tail spirals joining. 6. *koósu maáka* – embroidery design: this motif is associated with the village Asindoopo, and is a variant on a neckerchief motif. 7. *lóntu édi* – around the head: also found as pattern on manioc cakes and as hairbraiding pattern. 8. *lakpá* - cross: pendant imported from French Guiana. 9. *líba kumútu* - crescent moon: known as a cicatrisation design. 10. *kópu máu* – house gable: known as a cicatrisation design. 11. *íngi kódjo* – Indian club: known as a cicatrisation design. 12. *sán tánda* – saw tooth: patchwork pattern from early twentieth century and known as woodcarving pattern. 13. *kayána báta* – Cayenne bottle: named after a oil-and-vinegar bottle with double necks from French Guiana, and used as cicatrisation design. 14. *kokóima* – no etymology: common design for ladles, spoons, and rice mounders. 15. *nyaká kokóima* – intersecting *kokóima*: a variation on *kokóima* (Price 1993, 120-121).

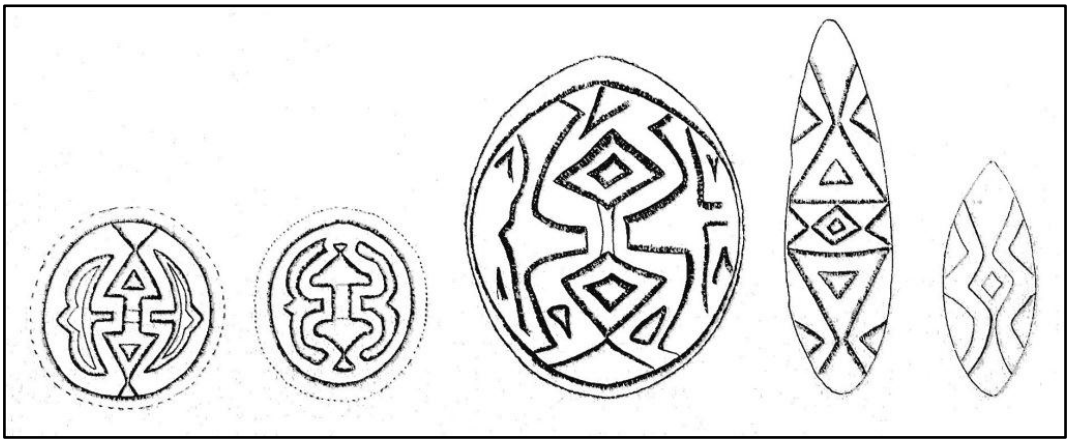


Figure 19. Three bowls and spoons decorated with engravings. It is stated that these decorations designs represent frogs and toads (Panhuys 1898, 66).

4.7 Summary

The Maroons are the descendants of escaped slaves from the plantations who formed their own communities in the tropical forest. Not only did they adapt techniques and methods to survive in this new environment from neighbouring Amerindians, like the shifting cultivation strategy, but they also incorporated Amerindian water and forest spirits into their religion. It is probable that these two communities lived in a much closer relationship than previously thought and that Maroon communities were actually of mixed descendant.

Calabash trees are planted in villages and horticultural camps and owned by Maroon women. They are selected for preparation when ripe, and cleaned from the inner pulp by scraping, boiling and rinsing the calabash shell. Seven calabash cultivars are recognised by Maroons, which produce three main object categories: containers, bowls, and spoons: (1) *gaán kúya* tree - large rice washing bowls or as bowls to wash a body before burial; (2) *pempe kúya* tree and (3) *kuyêè* trees - spoons and ladles; (4) *koómbu kiíki* tree - covered containers; (5) the *bakáa kúya* or (6) the *mátu kúya* tree - drinking bowls and hand-washing bowls; (7) the *bíngo kúya* tree - drinking cups.

The containers can be subdived into: (1) *gwamba apakí* - large undecorated containers to store rice, salted meat or fish; (2) *maíki apakí* - medium-sized containers to carry winnowed rice to the husband's village, decorated by men; (3) *sátu apakí* - small-sized undecorated containers to store salt; (4) *biôngo apakí* - small undecorated containers with fiber handles to store herbs, kaolin, and other ritual products; (5) *woron-godo krabasi* - container for transporting small objects, and in general worms on a fishing enterprise; (6) *godo-soe krabasi* - larger calabash fruits to carry fish; (7) one piece baskets completely made of a calabash including a handle; (8) baskets made of a calabash bowl

with cover and wooden handle and feet cconnected with metal pins. These last two categories were probably made by plantation slaves or free coastal people.

Bowls can be subdivided into: (1) *atita krabasi* - small and sparsely decorated calabashes to give drinking water to babies; (2) *bebé wáta kúya / dringi krabasi*- round medium sized decorated bowls used as water-drinking bowls; (3) w*ási máu kúya / wasi krabasi* - elongated medium sized decorated bowls to rinse hands after dinner; (4) *wási alísi kúya* - larger bowls with simple decorations used as rice-washing bowls; (5) w*ási uwíi kúya / kaseer krabasi* - large undecorated bowls used during rituals; (6) *wasi-dede krabasi* - washing bowl to wash and balm a deceased person.

Spoons are divided into the next categories: (1) *pikí kuyêé / spoen krabasi*- small spoons for eating; (2) *lalú kuyêè / spoen krabasi* - medium sized spoons for daily cooking; (3) *gaán kuyêè* - large ladles for community cooking; (4) *angú kuyêè / angoe-kwi krabasi* - shallow oval rice mounders to scoop out rice and to serve it in a nice shape.

The fourth main object category are musical instruments made of calabashes, namely the banjo, the calabash drum and the calabash rattle, which are all known to Creoles, whereas the calabash rattle is also used among the Maroons. It is not known which calabash cultivar is used for these objects. Other objects made of calabash are calabash rings to place round calabash bowls and containers on, as sniffing box or as an ash tray. The calabash is also used as suction device - *kopoe krabasi*, whereas also other plant parts of the calabash tree and its fruit are used as medicine or in rituals.

The bottle gourd is grown in the villages and horticultural camps of Maroons, and two cultivars are known: a small bottle shaped gourd known as *papagodo*, and a large round one known as *kágo gólu*. The bottle gourd is used as a container to store liquids and is prepared by removing the pulp and leaching out the bitterness in order to maintain the taste. The bottle gourd is also used as musical instrument: as a musical bow and as a natural dried rattle. Other purposes of the bottle gourd are as rolling pin or spoon, but also for ritual and medicinal purposes.

Art is an important aspect of Maroon daily life, and this influence the calabash and gourd objects: (1) aesthetic considerations influence all aspects of Maroon culture; (2) specialists; (3) aesthetic value of the object; (4) art specialization through gender; (5) social context of the object; (6) reciprocity; (7) courtship between man and woman; and (8) money and tourism.

It is assumed that bottle gourds were never used as artistic medium and are only decorated for ritual purposes with natural dyes. However, museum objects contradict this assumption. At least two objects served as artistics medium and some water vessels and spoons are decorated with engravings and natural dyes. Whereas calabash objects varying from containers, bowls, spoons, baskets till calabash rattles and calabash drums are

decorated with engravings, incissions, pyro-engravings, paintings, *pemba dotti*, and varnish.

From the 18th century till second half 19th century calabashes were decorated with rosaces, geometric designs, border designs, textured animal figures, and *kaolin* clay by Afro-Surinamers and Maroons. This design is similar to decorations on gourds in West Africa. From the second half of the 19th century Maroon men began using commercial tools and made concentric arcs and circles on the outsides of calabash containers and bowls. During this period Maroon women began experimenting on the interior of these objects. The West-African style became a New World style. In the late 19th century calabashes are decorated with colourful paintings, whereas Maroon calabashes were over-decorated by coastal people and it is from this period that we find calabashes of mixed origin. From the end of the 19th century we find complicated geometric textured designs on two-piece containers made by Maroon men with the help of commercial tools. Maroon women decorated the insides with symmetrical designs with the use of glass pieces in shallow bas-relief. From the 20th century there exist regional diversity based on figure and background. It is since 21st century that the edges of the bowls are pierced by Maroon women and that beauty overcomes functionality.

Calabash decoration among the Saramaka is conceptualised in design ideals: (1) decorated calabash bowl has an outside border as well as an inside border. (2) Designs are executed with the scraped edges on the inside or on the outside. (3) The inner design is bilateral symmetric around the equator of the bowl. (4) The balance between the figure and the ground area is of importance. There exist a difference in style between the design shape of men and women.

Chapter 5 The Amerindian calabashes and gourds

5.1 Introduction

As mentioned in Chapter 4, a lot of research has been done on calabashes and gourds among the Maroons of Suriname. However, this kind of research is lacking for the Amerindians, and besides, information about calabashes and gourds found in the ethnographic literature is quite sparse. For example, if one reads the chapter about the Guianas in the *Handbook of South American Indians* (Gillin 1948) and parts of *An Introductory Study of the arts, crafts and customs of the Guiana Indians* (Roth 1924) and searches for information about calabashes and gourds among the Amerindians only the following statements can be found:

1. The calabash is cultivated by the Amerindians of the Guianas (Gillin 1948, 825, Roth 1924, 219).
2. A calabash whorl is used for a hooked spindle in order to spin cotton (Gillin 1948, 839).
3. Calabashes are used as drinking cups and water bottles due to the scarcity of smaller pottery vessels. These cups or water bottles are often decorated with incised designs (Gillin 1948, 845; Roth 1924, 302), or decorated with paintings in natural dyes (Roth 1924, 301-302).
4. Calabashes are used among the Warao as containers and they are prepared by boiling them for an hour after which they are cleaned from their inner pulp (Kirchhoff 1948, 874; Roth 1924, 302).

Apart from the last example, *The Handbook of South American Indians* does not mention the persons who used the items; instead it is merely stated as general information. Furthermore, no specific plant species are mentioned, nor the specific source material. However, several photographs from this chapter depict gourds. This shows that former ethnographers often give general information only about the Amerindian use of calabashes and bottle gourds, and besides, that no eplicit distinction between the two kinds of species was made. *An Introductory Study of the arts, crafts and customs of the Guiana Indians* (Roth 1924) gives merely a sparse overview of calabash use by different groups, and also here a specific study is lacking.

This chapter will present the results from the fieldwork undertaken by the author in Donderskamp (Konomerume), a Kari'na village, supplemented by the available literature information about the Amerindian use of calabashes and gourds, and the Amerindian calabash and gourd collection of the National Museum of Ethnology in Leiden and the Amerindian calabashes and gourds of the Stichting Surinaams Museum in

Paramaribo. This chapter will try to give an overview of the different uses and the decoration of the calabashes and gourds in Suriname in the past and nowadays.

Map 3. Map of Suriname, with the Amerindian villages and the spoken languages in these villages. Konomerume is indicated as Donderskamp along the Wayombo River (Carlin and Goethem 2009, 4).

5.2 Amerindians

In Suriname Amerindians are referred to with the Dutch word *Indiaan* and the Sranantongo word *Ingi*. Both these terms have derogatory connotations and therefore official organizations and outsiders use the term "Indigenous Peoples" (Dutch for *Inheemsen*) in their communication on national and on international level. The Amerindians in Suriname are not a single united group as there are nine distinct Amerindian languages spoken by eight different ethnic groups (Carlin and Goethem 2009, 9). The coastal Amerindians are the Kari'na (Caribs) which means "people" (Hoff 1968, 1), and Lokono (Arawak), whereas the Amerindians from the hinterland are the Trio, Akuriyo, Wayana, Sikïyana, Tunayana (Katwena) and Mawayana. The Lokono and Mawayana both speak a different Arawakan language, whereas the other six groups speak distinct Carib languages. Moreover, these languages are not mutually intelligible (Carlin and Goethem 2009, 9; Kloos 1975a, 14).

In order to get more information about the former and present use of calabashes, it was decided to execute fieldwork in a Kari'na village during two short term periods, one of five weeks and the other of two weeks in the months July until September 2010. The fieldwork was carried out in Konomerume, also known as Donderskamp, which is located at the Wayombo River in northwest Suriname (Map 3).

5.2.1 Konomerume

The Amerindian village Konomerume gets its meaning from the Kari'na word *Konomerume* which means "thunder", or *donderen* in Dutch. Donderskamp is the Dutch name for the village used by non-indigenous people (Arkel 2006, 10; Yamada 2010, 9). The villagers explain this name by referring to the weather conditions of thunder and lightning, occurring regularly in this area, whereas another explanation for the Dutch name is the work of the Dutch priest, pater Petrus Norbertus Donders (1809-1887). As a missionary he arrived in 1842 in Paramaribo, joined the Redemptions in 1867, was mostly active in Batavia caring for the lepers, and after 1868 he was one of the first priests who started missionary work among Amerindians in general (Vernooij 1989, 84-85), and specifically among the Amerindians of the Wayombo area (Desserjer 1986, 123). Supposedly, Konomerume is named after him (Bruijning and Voorhoeve 1977, 158). His statue is situated in the Catholic Church in Konomerume.

Nowadays Konomerume is seen as a Kari'na (Carib) village with approximately 350 inhabitants (Yamada 2010, 11). Konomerume is situated geographically at the social border between the Kari'na people and the Lokono (Arawak). In the east lies the Carib village of Corneliskondre, whereas to the west lies the Lokono village of Tapuripa. The

village of Konomerume is of mixed origin, as originally the Kari'na were located near the river, whereas the Lokono lived on the savannah. Through intermarriage the villages merged, with predominantly Kari'na (Yamada 2010, 11, 69-70). From history it is known that Kari'na and Lokono villages were situated next to each other (Carlin and van Goethem 2009, 11). The Arawak probably settled into the village in the beginning of the twentieth century. Also other Amerindians like Warao are represented in Donderskamp, and it is said that the villagers are from mixed ancestral Amerindians or Creoles (Arkel 2006, 54). The village has a village council consisting out of a chief or *kapitein* and four council members or *bashas*, of which two are women. This council was elected in 2009 by the village. The council serves as a mediator between villagers and the government as well as outsiders (Yamada 2010, 12).

The Amerindian language spoken in Konomerume is the *Aretyry* dialect of the Cariban language which is spoken in the western part of Suriname and eastern part of Guyana, and is also known as *Murato*. This *Murato* term is controversial. The term *Murato* would reflect the intermarriage between Kari'na from western Suriname with Saramaccan or Kwinti groups. However, Konomerume villagers see themselves as "pure" Kari'na (Kloos 1971, 84; Yamada 2010, 13), and not from mixed origin. There are two dialects spoken in Suriname, of which *Aretyry* is one, the other is *Tyrewuju* which is spoken in the eastern part of Suriname and is seen as the prestige language (Hoff 1968, 26; Yamada 2010, 11, 69-70). Kari'na can be classified as an endangered language (Carlin and van Goethem 2009, 15). In Konomerume Kari'na is spoken by older people, whereas the younger generations speak Sranantongo and Dutch. Nowadays some villagers try to relearn their native language in the Kari'na School.

Kari'na houses consist traditionally of two separate structures, a kitchen and workplace and a structure to sleep and keep valuables. These structures are traditionally made from wood with thatched roofs and walls. However, nowadays they are often replaced with corrugated iron and concrete, as thatched roofs need more maintenance and skill to build, although being cooler. The closer any settlement to Paramaribo, the more concrete is used for constructions (Carlin and van Goethem 2009, 12). In Konomerume one can observe houses made of wood with thatched roofs, as well as houses made of corrugated iron and concrete.

The Kari'na are agriculturalists and supplement their diet with hunting, fishing and gathering of fruits. The men clear the garden plots, whereas the women harvest, therefore the plots should not be too far away from the village. The harvesting of the crops is done by the family unit, consisting of a man, his wife and their daughters, or by the wife with her daughters and sons. The most important plant cultivated on the garden plots is manioc, bitter as well as sweet variants. It is used to make cassava bread, and a

fermented beverage called *kasiri*. This *kasiri* can be fermented to different degrees of which the unfermented or minimally fermented variant is used on a daily basis as it is nourishing and supplements the diet. Also, when harvests fail or the drinking water is unclean this beverage is used instead. Next to manioc, cotton is the cultivated plant of importance. Cotton is used to make hammocks, and baby carriers. Basketry is a men's task, just like large scale fishing and hunting, whereas small scale fishing is done by women and small boys. Often people are involved in the cash economy (Carlin and van Goethem 2009, 12-13), which is true for Konomerume. Although not everyone is fortunate to have paid employment (Arkel 2006, 13-15), like for example a simple job as gardener of the school.

In Konomerume there are several facilities like a Catholic elementary school, where the children are taught in Dutch, and a medical clinic run by community members who had their education in Paramaribo, and who have a monthly income. To continue schooling, the children have to go to Paramaribo, which is expensive and causes social and financial problems for the families, as they live in boarding schools or with family who live permanently in the city (Carlin and van Goethem 2009, 13-14; Yamada 2010,12). Every September a football competition between the different villages located along the Wayombo River is organized, as Konomerume is the largest village. Next to a football team, the village has a Women's group, as well as an agricultural cooperative (Yamada 2010, 13). Furthermore, there are three religious communities, Roman Catholic Church, evangelic Protestant and Jehovah which are all represented in the village, and have their influence on the community (Yamada 2010, 76). Indigenous Day, or *Ingi Dei* in Sranantongo celebrated on the 9th of August is since 2007 a national holiday, due to the efforts of organizations like the Organization of Indigenous People of Suriname (OIS) and the Association of Indigenous Village Leaders (VIDS) (Carlin and van Goethem 2009, 14). This national holiday was also celebrated in Konomerume, although some inhabitants went to Paramaribo to represent Konomerume, and to show their arts and crafts among other Amerindians and tourists.

Konomerume can only be reached by boat: starting from Paramaribo by a two hour bus or car drive, depending on where the boat is boarded. The village Boskamp, also known as Coppename point, is often used as starting point for the boat trip. The boat journey can take anytime between 4 and 24 hours, depending on what kind of motor the boat is equipped with. On the first Monday of the month the Nickerie boat of the SMS (Scheepvaart Maatschappij Suriname) leaves Paramaribo, to arrive about 16 hours later, on Tuesday morning in Konomerume. It returns the same day at twelve o'clock, arriving in Paramaribo on Wednesday. The teacher's boat is traveling back and forth to Boskamp and takes approximately 12 hours. However, this boat is only used in the holiday to bring

the school teachers to the city and back again. A dugout canoe or *korjaal* with an outboard motor can take 4 hours to Boskamp depending on the capacity of the motor.

Besides transport by boat, there is also a possibility to travel by airplane, as there is an airstrip in Konomerume. However, these charter flights are quite expensive. The main users of this airstrip are medical doctors or politicians who visit the community during election season (Yamada 2010, 11). While writing this thesis the transport between Paramaribo and Konomerume became difficult and expensive, this extensively affects the villagers of Konomerume to travel to Paramaribo to buy different goods. For example the Nickerie boat travelled for a while on an irregular basis back and forth and the government decided to add an extra boat. One can only hope that in due time the government will execute the plan for constructing roads in the interior of Suriname, in order for Konomerume and other villages to be reached properly.

5.3 Calabash use in Konomerume

Most of the information about calabashes and gourds was collected through interviews and observation. Additional information was collected on informal occasions, participating in village activities varying from helping with the production of cassava bread, attending birthday celebrations to official festivities like Indigenous Day.

Figure 20. A calabash tree bearing fruits near the house in Konomerume (photo by Meulenberg).

5.3.1 Growing and preparation

The calabash tree is widely grown in Konomerume near the houses of the owners, and apparently not on garden plots (fig 20). Not everyone owns a calabash tree, but there is a demand for calabash fruits even from non-owners. The calabash tree is in general known among Kari'na as *kuwai* (Yamada 2010, 849), *kuwa:i* (Hoff 1968, 414), or *kwa'i* (Ahlbrinck 1931, 258). In Konomerume they refer to the calabash as *krabasi*, or *kuwai*. The interviews made clear that calabash fruits are used for a variety of purposes. In addition other parts of the tree and the calabash inner pulp are known to be used. The calabash while still hanging in the tree is selected for its green colour, and the sound it produces while knocking. The next phase depends on what kind of object will be made of the fruit. For example, for cups the calabash is cut in two, after which the inner pulp is removed by using a spoon or knife. Then it is boiled in water after which the leftovers of the pulp are removed with the help of a spoon, knife or glass, and then the shell is dried in the sun, otherwise the inside will get black. It is often stated by the women that their husband or another male person in the family cut the calabash into two parts, while the remaining procedure is performed by the women.

5.3.2 Calabash variants

In Konomerume, at various times the existence of different kinds of calabash trees with different fruits that vary in form and size were mentioned. An example is the calabash tree of which the fruits are known as *posi*. The calabash of this tree is small and tapering. Several informants stated that this particular calabash variant was used to make calabash spoons. However, Hoff refers to this kind of species as a calabash cup for drinking (Hoff 1968, 424), whereas Yamada only refers to *posi* as calabash and *krabasi* (Yamada 2010, 806). Another calabash variant is a small kind of calabash which is used to drink medicine from, and used as a suction device. Only one informant mentioned the name of this calabash variant, *mekopupo* or monkey head, but this variant of the calabash tree does not grow in Konomerume. The objects made of this kind of calabash will be further discussed elsewhere (paragraph 5.3.10).

5.3.3 Calabash bowls

In Konomerume, calabashes are used while drinking *kasiri*, a fermented beverage made of cassava. The bowl made of the calabash is named by the Kari'na *kwa'i*, and refers not only to the calabash bowl, but also to the calabash tree. The calabash fruit is cut crosswise to create two bowls. Removing the inner pulp is stated as not difficult, and the fruit is cooked in water after which the pulp can be removed easier (Ahlbrinck 1931, 258). Sometimes, at least on one occasion in Konomerume, parts of a purple potato are added, to give the inner side of the calabash bowl a nice purple colour, but it is not clear if this was only occasionally or a common practice.

Informants argued that the calabash cup would maintain the temperature of the *kasiri*, and therefore would maintain the taste of the beverage, which was regarded and explicitly stated as very important. Moreover, it was stated that metal and plastic would cool down the *kasiri* and affect its taste. Menstrual woman are not allowed to drink from the common cups and they have to drink from their own metal or plastic cups. This practice is probably connected with the idea that everything which is connected with reproduction in a woman is considered to have a distasteful smell for the water spirit *oko:yumo*, and as such menstruating women and girls, and women who have given birth avoid the river, wells and marshes to protect themselves from the water spirit. Also menstruating women are not permitted to serve *kasiri*. It is thought that the smell could be transmitted due to close contact to others, resulting in offending *oko:yumo* (Kloos 1971, 95). This would explain the practice by women of using metal and plastic cups while menstruating. Besides *kasiri* also other beverages were consumed from the calabash bowl, like water.

Figure 21. Calabash half used to scoop cassava flour, Konomerume (photo by Meulenberg).

In the case of *kasiri* drinking, having a cup of a specific kind of material is preferable, which is also seen while drinking *maté*, a tea made from the leaves of the *Ilex paraguariensis* (nowadays it can refer to the tea or to the plant). Originally *maté* is the Quechuan word for gourd, but it also refers to the cup or vessel made from a gourd, which is preferred above all other cups to drink *maté* from. Moreover, it is stated that an old *maté* cup is preferred above a new gourd, as the new one needs to be prepared before it can be used. The new gourd is filled with damp yerba which stands for several days, although the water is refreshed in order to avoid fermentation, as this, next to mold, can spoil the gourd cup. The shell of the gourd is porous and it will take over the essence of the product in it and thus gets seasoned, which is important, because the older the cup, the better the seasoning (Heiser 1979, 171-175). What is interesting for this parallel is that in general, as well as in Konomerume, calabash cups are treated in a similar way. For example, there are certain calabash cups which are only used for *kasiri*. During a celebration an adolescent had poured regular beer in a calabash cup which was property of his aunt and which was meant for *kasiri*, and her reaction was furious. While we might think that calabashes and bottle gourds have different origins, and are prepared in different ways, some similarities between the two can be found. Furthermore, it can be assumed that calabash drinking cups are not used due to the scarcity of smaller pottery vessels (Collomb 2003, 134-135; Gillin 1948, 845), but rather for the maintenance of taste. Especially as you only need a few cups, because they are shared, in order to serve people *kasiri*, like in Konomerume.

The example of drinking *kasiri* from calabash bowls is also seen among the Wayana of Suriname and French-Guiana. The calabash or *Crescentia cujete* is known among Wayana as *kalapi*. Also pouring *kasiri* into ceramic cups can be done with the help of a calabash bowl (Duin 2000/2001, 54). This similar practice was also observed in Konomerume. During celebrations two carriers, often two female teenagers but also older females and even males, carried a plastic bucket filled with *kasiri* and a plastic bucket of water to the people who were present to give them *kasiri* with the large calabash bowl in order to fill the smaller calabash cups to drink the *kasiri* from. After returning the small cups, they were rinsed in the plastic bucket with water, after which they were re-used. The same practise was observed in Galibi and Kari'na villages in French Guiana, where *kasiri* was distributed during *omaŋga:no*, a mortuary feast (Vredenbregt 2002, 78). The Barami Caribs of British Guiana used several calabash cups to drink from (fig 25), and had also bottle gourd containers at their disposal (Gillin 1936, 49). In Konomerume, a calabash cup held upside down meant that the person had had enough, whereas the calabash held open meant that the person wanted more *kasiri*, after which the cup was refilled. However, it was argued by Ahlbrinck that calabash cups were used to drink

water and chocolate from, whereas the *sabe:ra* (a specific kind of pottery) was used to drink *kasiri* from (Ahlbrinck 1931, 427).

It must be noted that calabash bowls are not only used as drinking cups, but also to scoop water if one needs water (fig 22), or during bathing (Hagen 1991, 3). Small as well as large calabash bowls can be used for this kind of purpose. Another observation using calabash bowls was during the processing of bitter cassava into cassava bread. There are different stages in this process: first the cassava is harvested on the plots, after which it is brought to the house, where the outer skin is scraped and peeled off. This is done with the help of a knife. Then the peeled cassava is grated on a perforated biscuit tin set on a wooden board. The cassava pulp is put in the *matapi*, a woven tube which assures that the cassava pulp is detoxified by squeezing the fluid out of it (Carlin and Goethem 2009, 13; Kloos 1975a, 17). The poisonous fluid or *kasuripo* is collected for further treatment into *peperwater*, and the dry cassava flour is sifted with a metal or woven sifter. It is at this point that a calabash cut through the length is used as ladle or spoon to put the cassava flour on top of the sieve (fig 21). However, this practice of using a calabash bowl as ladle is normally done with a woven fan, which is woven by men, a practice which is only carried out by a few men in Konomerume. The sifted flower is then baked on a metal griddle, and the cassava bread is dried in the sun, after which it is consumed with for example *peperwater*. It was even observed during *Ingi Dei* that calabash bowls were used to eat food from.

Figure 22. Calabash half used to scoop water, Konomerume (photo by Meulenberg).

The bowls encountered in Konomerume were completely plain, not decorated with paintings, although some had modest engravings on the outer surface (fig. 23). Several Amerindian calabash bowls are known as museum objects and they are decorated with paintings and engravings (table 8), but the decoration will be discussed in more detail in paragraph 5.5.

Figure 23. Decorated calabash bowl with incisions. In the background: calabash cups together with the clean dishes, Konomerume (photo by Meulenberg).

Amerindian calabash bowls					
Accession number	**Culture**	**Painted**		**Engraved**	
		Outside	**Inside**	**Outside**	**Inside**
1817-170	Kari'na	•	•		
1817-171	Kari'na	•	•		
1817-172	Kari'na	•	•		
1817-173	Kari'na	•	•		
2324-667	Kari'na	•	•	•	
SSM 87-3-1	Kari'na			•	?
SSM 87-3-2	Kari'na			•	?
SSM 87-3-3	Kari'na			•	?
SSM 87-3-4	Kari'na			•	?
SSM 87-5-5	Kari'na			•	?
SSM 193-1-15	Unknown				?

Table 8. Calabash bowls from the National Museum of Ethnology in Leiden and the Stichting Surinaams Museum in Paramaribo, compared by culture, and presence of painted or engraved decoration on the inside or outside of the bowls. The objects can be found in Appendix B and C.

5.3.4 Calabash spoons

Calabashes are also used as spoons. In Konomerume especially grandmothers were considered as users of calabash spoons when they made *samroe*, or cassava pap. *Samroe* is made by dissolving cassava bread in water or preferably milk, and subsequently heated. In particular the outer crust part of the cassava bread is used for this practice as these are thinner and easily dissolved. When warm, it can be consumed with or without sugar. Nowadays calabash spoons are no longer used. According to Ahlbrinck these spoons were called *tupo*, or spoon and they are made by first cleaning the calabash of its inner pulp before cutting the shell in several pieces (Ahlbrinck 1931, 258), with each piece serving as a spoon (fig 24). According to Yamada *tupo* refers to a serving spoon, as well as a plate for food (Yamada 2010, 825).

It was often stated that the calabash tree of which the fruits are called *posi* were used as a spoon when making *samroe*. In the Suriname museum collection several calabash spoons were encountered (table 9). According to the Penards four spoons were called *kuwai posi*, or *papkalebasje*, and the other four *kuwai tupo*, or "calabash spoon". The so-called *kuwai posi* are made from small tapering calabashes which are cut lengthwise in two pieces. These calabashes are painted with a reddish-brown paint in the inside and on the outside showing decorative patterns of the same paint. Two of the so-called *kuwai tupo* are made from large calabash shells, of which four would form together a whole calabash. They are decorated with black painted decorative patterns in the inside as well as on the outside, whereas the other two are decorated in the same way as the *kuwai posi* and have the same shape and size. The whole surface of these calabashes is painted with beige to light paint. This questions the basis of the categorisation by the Penards, but if we consider that *tupo* indeed refers to a spoon as well as a plate it is possible that the last category (*kuwai tupo*) could also be used as a plate which makes sense if the size of these objects is considered, especially as it was stated by informants in Konomerume that the calabash spoons from the National Museum of Ethnology could also be used as plates.

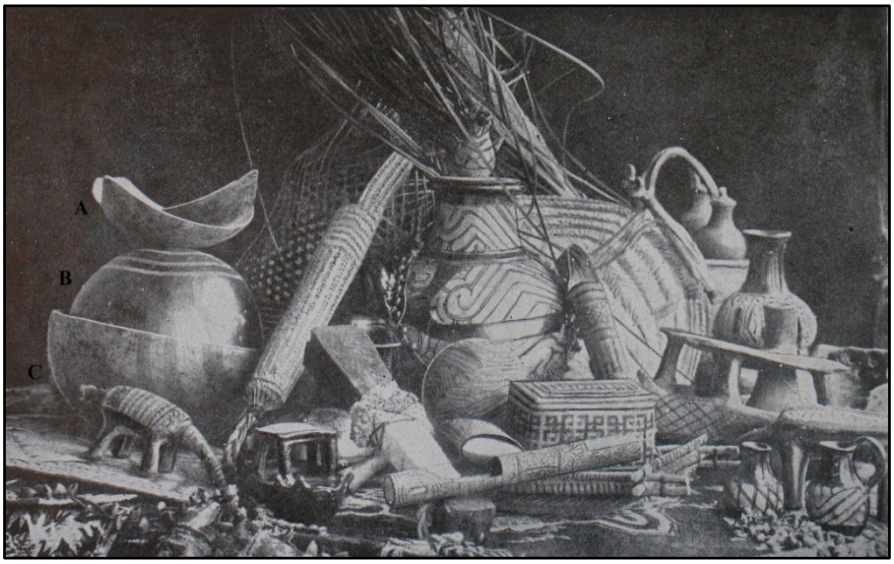


Figure 24. Amerindian objects: (A) two calabash spoons, (B) a decorated calabash with engravings, (C) bowl of a calabash decorated with engravings (N.N. 1903).

Amerindian calabash spoons						
Accession number	**Name**	**Paint**		**Designs**		**Part of calabash**
		Outside	**Inside**	**Outside**	**Inside**	
1817-141	Kuwai posi	•	•	•		½
1817-142	Kuwai posi	•	•	•		½
1817-143	Kuwai posi	•	•	•		½
1817-144	Kuwai posi	•	•	•		½
1817-148	Kuwai tupo	•	•	•	•	¼
1817-149	Kuwai tupo	•	•	•	•	¼
1817-150	Kuwai tupo	•	•	•		½
1817-151	Kuwai tupo	•	•	•		½

Table 9. Kari'na calabash spoons from the National Museum of Ethnology in Leiden, with their indigenous name, presence of painted decoration and designs, and the location, and the fraction of the calabash shell used. All the objects can be found in Appendix B.

Amerindian calabash containers				
Accession number	**Use**	**Painted**		**Engraved**
		Outside	**Inside**	
1817-136	General	•	•	
1817-137	General	•	•	
1817-138	General	•	•	
1817-139	General	•	•	
1817-140	General			•
1817-145	Fishing	•		
1817-146	Fishing	•		
1817-147	Fishing	•		

Table 10. Kari'na calabash containers from the Suriname collection of the National Museum of Ethnology in Leiden, with their use, the kind of decoration painted or engraved, and the location of the decoration. All objects can be seen in Appendix B.

5.3.5 Calabash containers

It was often stated by informants in Konomerume that calabashes were used to keep small items in, for example at the time of making the photo in fig 23 the decorated calabash bowl contained seeds. However, the bowl was not covered, which is done among the Maroons (paragraph 4.4.1). These kind of calabash containers, bowl with cover, were as such not observed in Konomerume, but we can assume that the peoples of Konomerume used calabashes as containers, which were not used to drink from or to eat from, but to keep items until the moment they were used. Based on their shape these can best be defined as bowls, whereas based on their use they can best be defined as containers. Calabashes among the Trio were used to store food: *koeak*, the granular flour of cassava is stored in small calabashes (Goeje 1906, 13), although it is not clear whether in a bowl or in a container.

The typical calabash containers that we know among Maroons are known in the Amerindian museum collections (table 10). A distinction based on shape and use can even be made between calabash containers which are known (1) to keep food, beverages or other small items, and (2) calabash containers which are used to keep worms for fishing trips. As mentioned, the first was not seen in Konomerume, whereas the latter one actually was known. The first containers are made from calabashes cut through the middle, which are decorated with paintings in the inside and outside, except for object 1817-140 which is decorated with engravings. The latter calabash container is made out of a small tapering calabash of which the top is cut, the inner pulp removed, after which the outer surface is decorated. A rope of *zeilgras* (*Bromelia alta*) connects the bowl with the cover which can also serve as handle. According to the Penards these objects are called, *musokoloi jene* in Kari'na, and *lokaasworm-kalebasjes* in Dutch. They were encountered in Konomerume and used during fishing trips to keep the worms which served as bait; an example made of a gourd was encountered in Konomerume. There are two distinct methods to make these containers for fish bait. The first is to use one calabash of which the upper part is sawn off, after which the inner pulp is removed. The second method uses two calabashes: one for the bowl, and the other for the cover. This creates an overlapping cover and assures that the bait cannot escape. The other containers are known as *eetkalebasjes met deksels* which would imply that they were used to store food. Nowadays, Konomerume is influenced by the western consumption society, and families have a fridge or keep their food in metal or plastic buckets.

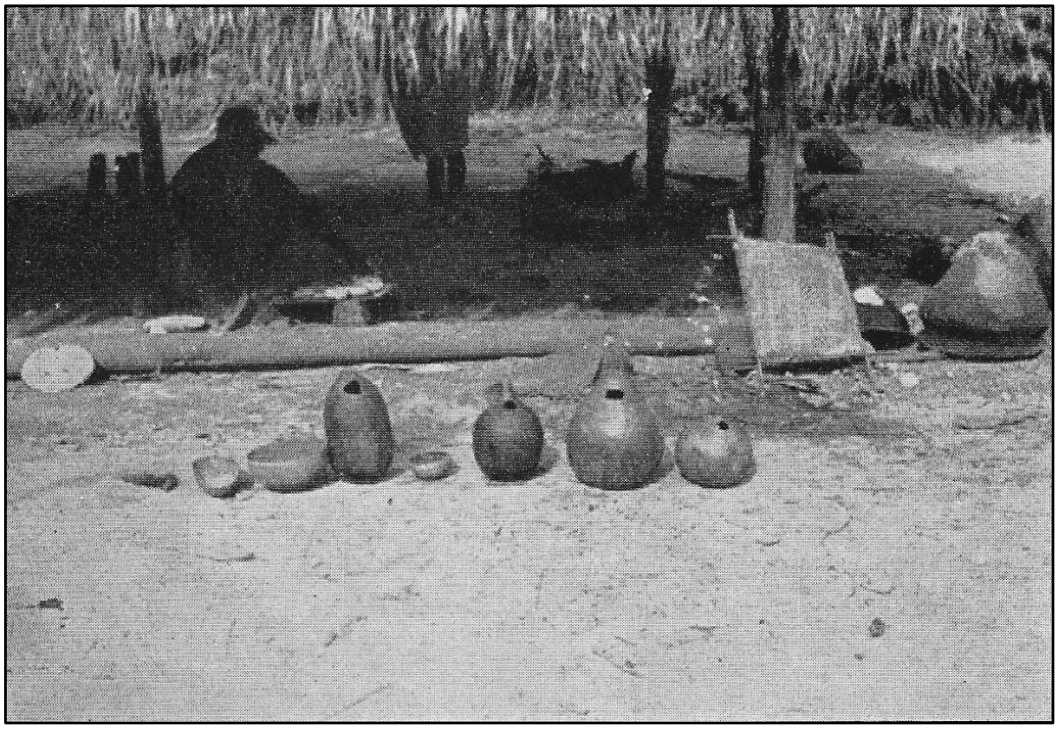


Figure 25. Several examples of calabash drinking cups and bottle gourd containers among the Barama River Caribs, British Guiana (Gillin 1936, Plate 19b)

What becomes clear from the first three distinctions is that the categorisation between bowl, spoon and container is not as clear among the Amerindians as among the Maroons (Chapter 4). A bowl can be used as drinking cup to drink *kasiri* or water from, but also to scoop water or cassava flour, or even to keep small items in. The museum objects give a much clearer category distinction, compared to the interviews in Konomerume. If this is due to the western view of categorisation, the lack of some categories, or due to the short term research, is unsure. However, what becomes clear is that more research is needed for these three categories as it can give us more information to answer the following question: How strict is the categorisation between bowl, spoon, and container?

5.3.6 Spindles

Spindles, or *kuiťa* in Kari'na, are made by men (Vredenbregt 2002, 108), of which several are owned by women to make fibres out of raw cotton (fig 26). The spindle stick, known in Kari'na as *kui'ta epu*, is made from *letterhout* or *snakewood* from the *Brosimum guianense*. Nowadays this wood is still used for its strong capacity. The upper part of the stick is carved with four or five carvings in a pattern (fig 27). The *yuku* ant depicted on the spindle is the black ant used during the initation rites of girls (Kloos 1975b, 48). These carvings make sure that the fibre is rolled up to the spindle. The upper spindle disk is known as *kuiťa emari-rï*, whereas the lower disk is known as *ira-papo-no*, or the lowest piece. These spindle disks are made from two calabash shells of different sizes and face each other with the hollow side, which assures rotation (Ahlbrinck 1931, 232). The spindle disks can be made of old calabash shells, as well as new calabash shells, both observed in Konomerume. The *snakewood* stick is centrally put through these disks. The upper half of the spindle disk is decorated with carvings of different shapes (Ahlbrinck 1931, 258), and can also be decorated with painted designs (fig 28) (Ahlbrinck 1931, 232; Vredenbregt 2002, 108), whereas the spindles encountered in Konomerume were not decorated.

Figure 26. Spindle used while spinning cotton, Konomerume (photo by Meulenberg).

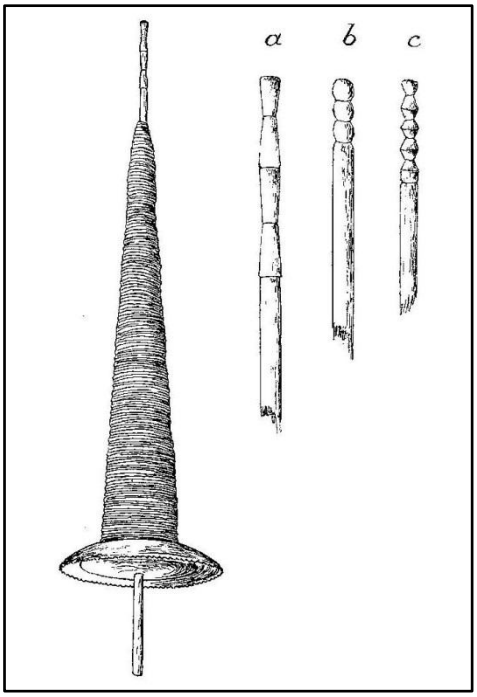


Figure 27. Drawings of a spindle with cotton, and several spindle stick top decorations: (a) backpart of the *yuku* ant, (b) head of the *kumako* ant, and (c) head of the *yuku* ant (Ahlbrinck 1931, Vol. II, 36).

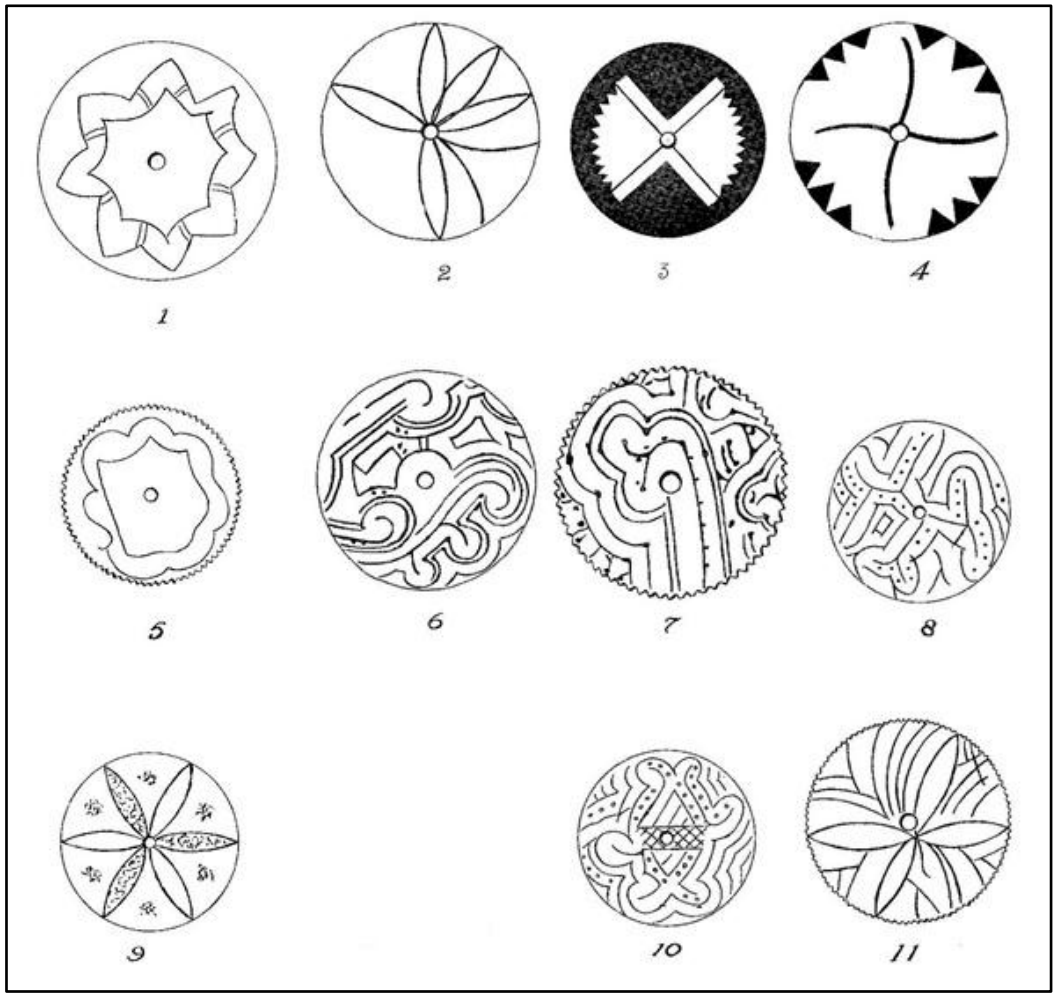


Figure 28. Eleven decorated spindle disks made by Kari'na. Numbers 2, 4, and 6 are from *Timeren*, nowadays known as Bigiston (Kloos 1971, 8), disk 9 is from Langamankondre, and 7 from Pierrekondre. Bigiston, Langamankondre, and Pierrekondre are situated along the Maroni River. Spindle disks 1 and 5 are from Doruskondre, and 10 from Sabakoe both in the Para district. All spindle disks are made of calabash shell except disk 9 which is of a turtle shell. Spindle disks 3 and 4 are relief carved, 6 and 7 are painted, whereas the others are carved (Ahlbrinck 1931, Vol. II, 232).

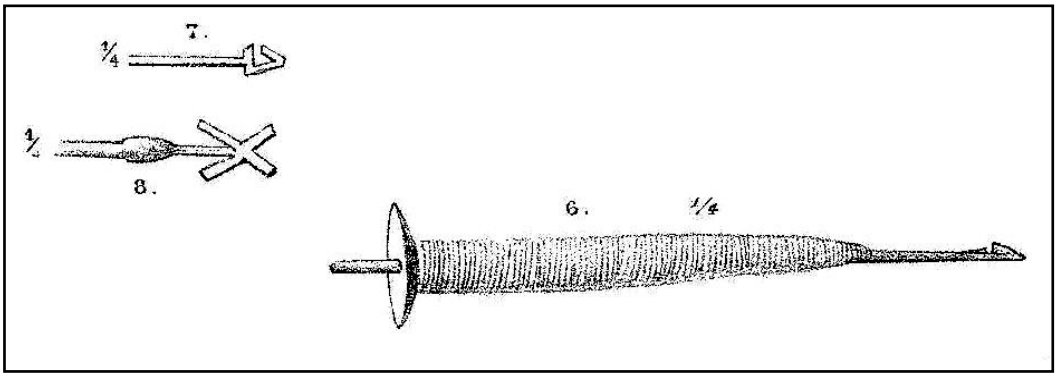


Figure 29. A drawing of a Trio or Wayana spindle (6), and two examples (7 and 8) of the spindle hooks made of bone (Goeje 1906, Pl VII).

Several spindles were encountered during the research of the museum objects. Not all the spindles were made and used by the Kari'na, and are engraved, while some were made by the Wayana which have a different hooked spindle top made of *letterhout* (fig 29), as previously mentioned by Gillin (1948, 839) and also observed by Goeje (1906, 17). Among the Wayana these spindles are called *maurukuntop*, whereas among the Trio they are known as *mal'epu* (Goeje 1906, 115). The spindles of the Wayana have disks of calabash shells as well as wood, which is hard to distinguish. The decoration on these spindles is made by engraving, whereas the Kari'na spindles are mostly decorated with paint. An overview between those made by Kari'na and Wayana is given in table 11. From the Stichting Surinaams Museum an example is known of calabash shell which served for several spindle disks (SSM-6-7, Appendix C).

Amerindian spindles							
Accession number	**Culture**	**Material disks**	**Decoration**		**Top**		**Top decoration**
			Painted	**Engraved**	**Hooked**	**Engraved**	
1817-154	K	C	•			•	b
1817-155	K	C				•	b
1817-156	K	C	•			•	b
1817-157	K	C	•			•	b
1817-158	K	C	•			•	b
1817-159	K	C	•			•	b
1817-160	K	C	•			•	b
1817-161	K	C	•			•	b
1817-162	K	C	•			•	b
2352-48	W	W		•	•		
2352-49	W	C		•	•		/
2352-50	W	W		•	•		
2352-51	W	W		•	•		/
2352-52	W	C		•	•		/
2352-53	W	W		•	•		/
2352-54	W	U	U	U	•		U
2352-55	W	W		•	•		/
2352-56	W	W			•		/
2352-57	W	C			•		/
2352-58	W	W		•	•		/
2363-114	W	C		•	•		/
5379-44	A	C		•		•	b
H-801	U	C		•		•	?

Table 11. The spindles of the National Museum of Ethnology in Leiden with their cultural affliation (A = Amerindian, K = Kari'na, U = unknown, W = Wayana), material disk: calabash (C), wood (W) or unknown (U), method of decoration: painted or engraved, shape of the top hooked or engraved, and top decorated according to the examples of Ahlbrinck in fig 27. All the objects, except for the wooden examples, can be found in Appendix B and C.

5.3.7 Modelling tool

Old calabash cups as well as new calabash shells (as long as the shell is hard) were and still are used in Konomerume as a modeling tool, or *kupewa* (Ahlbrinck 1931, 243, 258; Kappler 1854, 32; Vredenbregt 2002, 116; 2004b, 81). These tools are used when making ceramics in order (1) to remove surplus clay, (2) to make the wall straight, or (3) to make the surface smooth (Kloos 1975a, 21; Vredenbregt 2002, 116, 119). Among the Wayana this tool, or *pelo*, is used as a scraper to smooth the surface (Duin 2000/2001, 48), whereas among the Palikur from French-Guiana and Brazil this tool, *kalan*, is used to make the coiled walls strong and smooth (Bel 2009, 44-46). These objects are still used, and moreover, were very likely used as such already in the New World, before the discovery of America (Hofman and Bright 2004, 90). Usually the *kupewa* have a round to oval shape of which the rim can be jagged (fig 30) (Ahlbrinck 1931, 158, 243, 343), and in Konomerume it was observed that these tools had specific shapes according to their purpose (fig 31). During the stay in Konomerume, no ceramics were made, but the practice of making the modelling tools with the help of a knife was observed by a husband of one of the women who normally makes ceramics (fig 32). Several examples of different sizes and shapes are known for the collection of the National Museum of Ethnology (table 12).

Modelling tools			
Accession number	**Culture**	**Amount**	**Decoration**
370-529	Surinamese	2	None
591-39	Surinamese	13	Engravings on 2
2452-739	Surinamese	2	None

Table 12. The Suriname modelling tools made of calabashes of the National Museum of Ethnology in Leiden. All objects can be found in Appendix B.

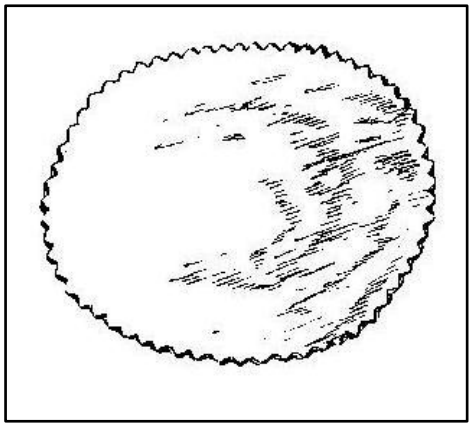


Figure 30. An example of a *kupewa* according to Ahlbrinck (1931, Vol. II, 87).

Figure 31. Three different modelling tools, Konomerume (photo by Meulenberg).

Figure 32. Production of a *kupewa* out of an old calabash bowl, Konomerume (photo by Meulenberg).

5.3.8 The *maraca*

The rattle, or *maraca*, made of a calabash is a musical instrument used during celebrations like *Ingi Dei* (fig 33 and 35). It was used in former times also as a tool by the *pïjai*, or shaman, which can be seen as one of the most important artefacts used by the *pïjai* (Ahlbrinck 1931, 269; Coll 1886, 21; Kappler 1854, 51). *Pïjai'*s are still respected and consulted in the coastal area (Carlin and Goethem 2009, 15). Unfortunately the last *pïjai* of Konomerume died several years ago, and youngsters are not willing to become a *pïjai* because of the restrictions in life when practising *pïjai*-isme. In Konomerume the *maracas* are nowadays used as musical instruments without their former religious purpose, and they are mainly used to play traditional music. The *maraca* is together with other objects of the *pïjai* kept in a square or rectangular two-piece basket, *yama:tu* (Vredenbregt 2002, 103, 106).

The calabash is perforated at the stem and on the opposite other side, after which the calabash is boiled in water, and the inner pulp is removed with the help of a stick. Glass sherds are put in the calabash to remove the inner pulp (Ahlbrinck 1931, 403). The *maraca* is decorated with incisions and holes and painted with designs by women. The incisions are made at four sides, horizontal and vertical and can be doubled as well. At the end of these incisions several hole(s) can be made (fig 36 and 37). These horizontal and vertical openings are known as *enu-ru*, "eyes of the *maraca*" and are accentuated with parallel lines, whereas the rest of the painting on the calabash is filling (Albrinck 1931, 278, 403-404). The handle, *it'apu-ru*, of the *maraca* is made of bent *sipo* wood and is not decorated among the Kari'na. It is combined with the calabash using a cord of cotton. Stones from the river fill the *maraca*, which represent the spirits who help the *pïjai* on his quest (Ahlbrinck 1931, 403-405: 1947, 45; O'Bryan 1990, 20). Also seeds of the *parakaru* flower (*Canna coccinea*) are used to fill the *maraca* (Ahlbrinck 1931, 360, 405; 1947, 45; O'Bryan 1990, 20). The power of the *pïjai maraca* comes from the stones (Goeje 1908, 14). The calabashes of the *maracas* in Konomerume were mostly decorated with black paintings, although other colours were used such as like red (fig 33). The *maraca* is played with a circling movement, and also the Arawak and Wayana know the *maraca* (O'Bryan 1990, 20, 23), as well as the Trio who use small rattles, *marákas*, made of calabashes with seeds inside them and a stem of reed grass. Also large *marákas* are known and are used by the *pïjai* (Goeje 1906, 24, 28, 115; 1908, 14). These large *marákas* are probably used during shamanistic activities, whereas the smaller ones are more regular and used for musical purposes (fig 34). Among the Wayana a calabash bowl was used during shamanistic activities (Goeje 1906, 27, 115; 1908, 18-19).

Based on the decoration a distinction can be observed between the museum objects. In general two combinations are possible: incisions with paint, and incisions with feathers and paint (table 13). Ahlbrinck mentions that the *maraca* handle top of the Arawak Amerindians is decorated with parrot feathers (Ahlbrinck 1931, 404), which is in contrast to the undecorated handle of the Kari'na (Caribs). Some of these *maracas* which were first ascribed to Caribs can now be ascribed as Arawak objects. For example, object 1508-1 is ascribed on the inventory card as Carib, however additional information which accompanies this object mentions that this object comes from Matta, a Lokono (Arawak) village. It can be assumed that four objects previously categorised as Surinamese or Carib, can now be ascribed to the Arawak. Especially, as all the objects are assembled in a similar way. Object 07-771 is merely categorised based on the kind of decorations that are painted on the rattle.

Figure 33. Villagers playing *maracas* accompanied with songs on *Ingi Dei*, Konomerume (photo by Meulenberg).

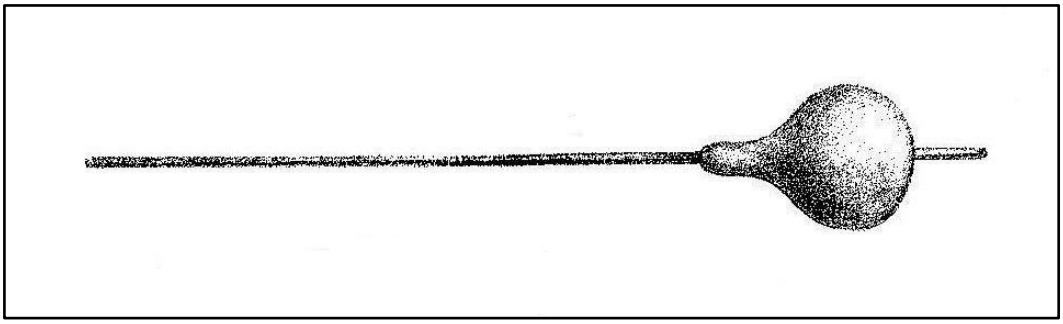


Figure 34. Drawing of a dance *marákas* of the Trio (Goeje 1906, Pl VII, fig 15).

Figure 35. A Konomerume *basha* with his *maraca* during *Ingi Dei* (photo by Meulenberg).

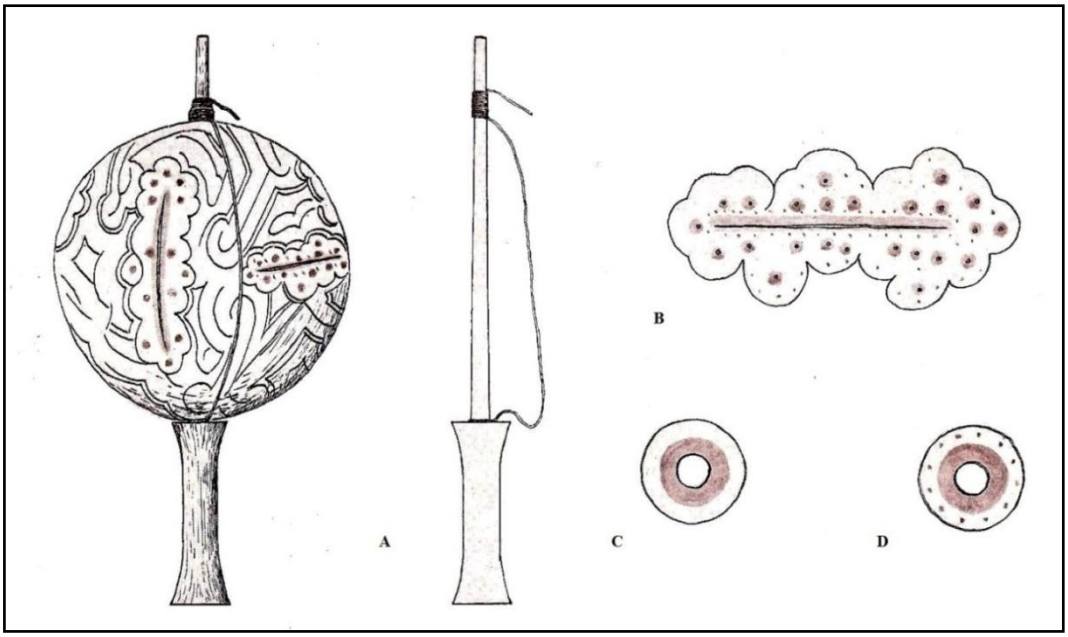


Figure 36. *Maraca* of a *pïjai* from the Suriname River, (A) handle with cotton cord without the calabash, (B) incision with decoration, and the (C) upper and (D) lower holes of the calabash through which the handle is put (Ahlbrinck 1931, 107).

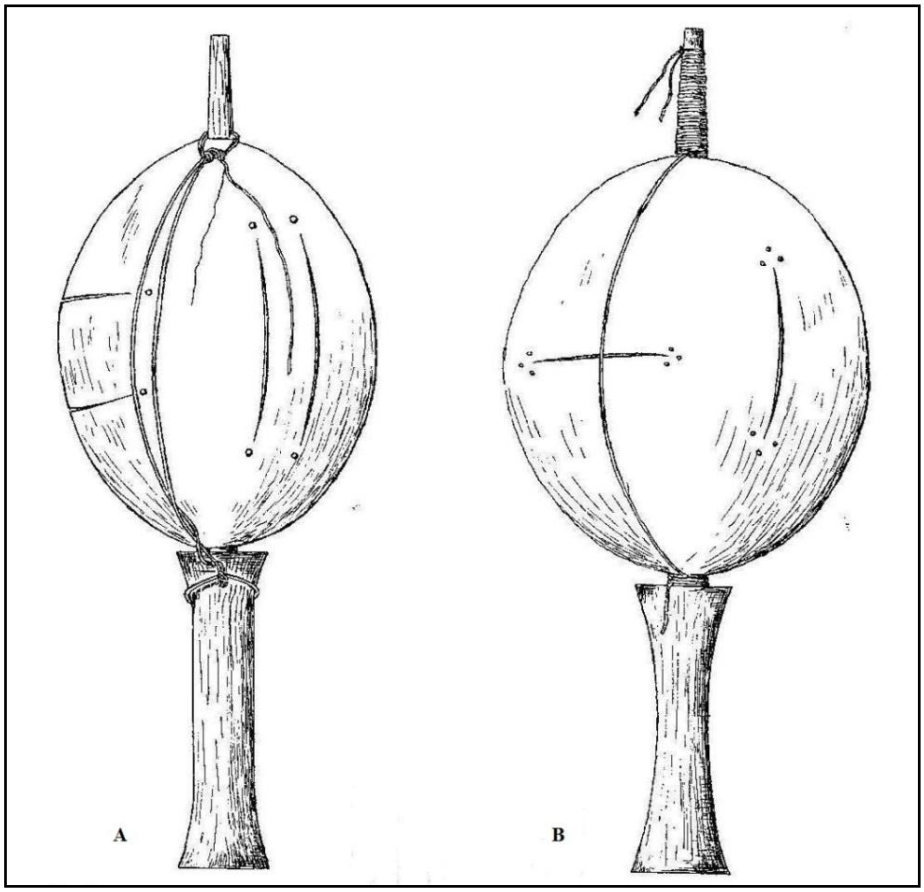


Figure 37. Two *pïjai maraca* examples (A) from the Maroni River with double incisions and one hole at either side of the incision, (B) from the Saramacca River with incision with three holes at either side of the incision. (Ahlbrinck 1931, 108).

Amerindian *maracas*					
Accession number	**Culture**	**Incisions**	**Paint**	**Feathers**	**Adjusted culture**
07-771	Unknown		•		Kari'na
360-7049	Surinaams	•	•	•	Arawak
370-576	Surinaams	•	•	•	Arawak
1508-1	Carib	•	•	•	Arawak
1817-198	Kari'na	•	•		Kari'na
2343-1	Carib	•	•	•	Arawak
2363-103	Arawak	•	•	•	Arawak
2363-104	Arawak	•	•	•	Arawak
H-795	Unknown				Unknown
H-803	Kari'na	•	•		Kari'na
SP-140	Kari'na	•	•		Kari'na
SP-U-2	Kari'na	•	•		Kari'na

Table 13. The *maracas* from the National Museum of Ethnology in Leiden and Stichting Surinaams Museum in Paramaribo compared by culture and decoration method. All objects can be found in Appendix B and C.

The next example will not only show the importance of the calabash used for the *maraca* , but also illustrates that differences exist between *maracas* of the same society. Also striking parallels, as well as differences with the Kari'na *maracas* will be seen. Among the Warao the calabash rattle or *hebumataro* is seen as the "spirit calabash", which is used to make contact with the spirits. The calabash is seen as the head or location of the life force of the supernatural powers. In addition to the fact that the fruits must have a perfect shape and form it is not allowed to be touched anyone other than the shaman himself. The upper layer of the calabash is scraped off. Holes at both ends are made to remove the pulp. There are four incisions made, two longitudinal and two transversal in the empty calabash. These slits are seen as mouths and they are decorated with triangular or rectangular designs. The shaman places quartz crystals which represent the spirits who will help him. Then he places the handle which is seen both as the legs of the calabash and as the axis of the universe. However, the insertion of the handle in the calabash is seen as the union of male and female symbols and gives life to the object. Then the rattle shaft is decorated with red feathers of a living parrot (*Psittacidae*) representing the hair of the rattle. The shaman has two rattles (fig 38), one for ordinary use and curing, and one which is the source of his shamanistic powers, and is used during festivities and elaborately decorated with feathers. This rattle is known as *marimataro* or "Calabash of the Ruffled Feathers" (Wilbert 1993, 131-137).

Figure 38. The two different rattles of the Warao shaman in their basket (Wilbert 1993, 136).

5.3.9 Other musical instruments

From the Wayana along the Litani River some other musical instruments were gathered by Goeje during the 1937 Dutch government expedition (table 14). Several of these objects are named *wung wung* according to the inventory list and they are made of a small hollow calabash/gourd with a hole through which a small stick with a cord is put. The hole is called *yolok eu*, or "angry spirit-eye/-whistle hole", and *bromtol* in Dutch. According to the similar descriptive information on the *wung wung* of the Wayana these can be compared with the *wun-wun* of the Kari'na mentioned by Ahlbrinck (1931, 405).

Musical instruments			
Accession number	**Culture**	**Description**	**Name**
2352-97	Wayana	Bromtol	Wung wung
2352-98	Wayana	Bromtol	Wung wung
2352-99	Wayana	Bromtol	Wung wung
2352-100	Wayana	Bromtol	Wung wung
2352-101	Wayana	Bromtol	Wung wung
2352-102	Wayana	Whistle	Unknown
2352-103	Wayana	Whistle	Unknown
2352-104	Wayana	Whistle	Unknown
2352-105	Wayana	Whistle	Unknown
2352-106	Wayana	Whistle	Unknown
2352-107	Wayana	Fluittol	Unknown
2352-108	Wayana	Fluittol	Unknown
2352-109	Wayana	Fluittol	Unknown
2352-110	Wayana	Fluittol	Unknown
SP-229	Kari'na		
SP-230	Kari'na		
SP-231	Kari'na		
SP-232	Kari'na		
SP-233	Kari'na		
SP-234	Kari'na		
SP-235	Kari'na		
SP-237	Kari'na		
SP-239	Kari'na		
SP-240	Kari'na		
SP-241	Kari'na		
SP-242	Kari'na		
SP-243	Kari'na		
SP-244	Kari'na		
SP-U-1	Kari'na		

Table 14. The musical instruments made of calabashes / gourds of the 1937 Dutch government expedition collected from the Wayana along the Litani River of the National Museum of Ethnology in Leiden, with the bottle gourd objects from the Stichting Surinaams Museum in Paramaribo. All objects can be found in Appendix B and C.

The *wun-wun* or *bun-bun* are musical instruments made of calabashes and gourds (Ahlbrinck does not name the material of which this instrument is made) and a warimbo twig connected by a rope (fig 39). The *pïjai* generates a specific sound after which the instrument is named, by holding the twig and rotating the instrument in the air, thus chasing away the angry/evil spirits (Ahlbrinck 1931, 405; 1947, 45). This would confirm the designation of the angry spirit-eye by Goeje. Furthermore, as these objects are made of a specific calabash type it can be assumed that these are also used for the variants mentioned by Ahlbrinck. However, from the shape of the object in fig 39, it is not clear whether it is a pear-shaped calabash, or a gourd. The figures depicted on the object are probably decoration lines.

The following fifteen objects of the SP series (SP-229 till SP-U-1, Appendix C) are bottle gourds, but they will be discussed here due to their similarity with the description of Ahlbrinck. These objects are small hollowed out bottle gourds, with a hole in the neck of the fruit. Some have a rope which is connected to a small wooden stick which is located inside of the bottle gourd. All are painted with black paint, some with red paint, and the decoration can be seen as typical Kari'na. It is possible that these objects were used in a similar way, as their use is unknown. Research in Galibi could give some new insights.

The other objects collected by Goeje are whistles made of small calabashes/gourds, with a mouthpiece of bamboo, of which some mouthpieces are missing, and another four objects are made of the same small calabash/gourds and are stated to be *fluittol* in Dutch. In Konomerume these musical instruments were not observed or mentioned, only the *maraca*.

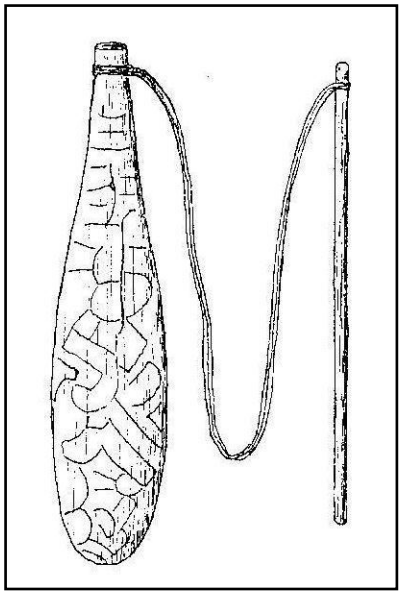


Figure 39. The *wun-wun* of the Kari´na along the Cottica River (Ahlbrinck 1931, Vol. II, 108).

5.3.10 Suction device

The calabash is also used as a suction device for medical purposes. This practice is known in Konomerume, and is still practised in Galibi (Carlin and Goethem 2009, 85-89; Spillebeen 2002-2003, 89), another Kari'na village, as is shown in fig 40. A person with a medical problem visits the *pïjai* who locates the source of the symptoms and makes an incision in the swelling. Next he positions a small hollow calabash without the upper part and filled with alcohol after lighting the fluid, against the swelling. Due to the pressure difference created, the bodily fluids will be sucked into the calabash. After the treatment the patient is healed, and the body fluids accumulated in the calabash are burned (Ahlbrinck 1931, 226-227, 258; Spillebeen 2002-2003, 89). While treating the patient the *pïjai* and his patient smoke the *urema:ri* (*Couratari guyanensis*) or the Amerindian pipe: the *pïjai* to contact the spirit world and for the patient to relax (Carlin and Goethem 2009, 85-89). Diseases which are treated with this practise are accumulation of fluids, joint and rheumatic pains (Spillebeen 2002-2003, 89). This practice is also known among the Maroons (paragraph 4.4.5)

These so-called suction devices are known in the Museum of Ethnology in Leiden. However, in contradiction to the non-decorated calabash used by the *pïjai* in Galibi (fig 40), the museum artefacts are decorated with painted designs and are all made by Kari'na and they are known as *menu soka topo* or "*vier kalebasjes om bloed uit het lichaam te kloppen*" (Objects 1817-163 till 1817-166, Appendix B) which refers to the practice.

Figure 40. The calabash used as suction device in Gailibi. A. The *pïjai* investigates the patient. B. The patient points the spot while smoking the Amerindian pipe. C. The *pïjai* sets the small calabash against the sore spot. D. The *pïjai* lits a match. E. The result of the practice (Carlin and Goethem 2009, photos 85-89).

5.3.11 Other purposes

Calabashes are further used by Amerindians for a variety of purposes, and not only is the calabash shell used but also other parts of the fruit and the tree are used. (1) The calabash is known in Konomerume to be used as a floater as can be seen in fig 41.A (Ahlbrinck 1931, 258), but this was not practised during the fieldwork period. An example is known in the National Suriname Museum (Object H-810 Appendix C), although it is possible that this example is made from a large *Lagenaria siceraria* rather than a *Crescentia cujete*. (2) The shell of a calabash is used as the bottom of bamboo paint cans (fig 41.B) (Ahlbrinck 1931, 78, 258), whereas (3) among the Trio the calabash is used to store krapa-oil (*Carapa guianensis*) where the hole in the calabash is closed with wax (fig 41.C) (Goeje 1906, 9, 115 Pl VII, fig. 1). Informants in Konomerume stated further that the calabash could be used as a (4) hairpin, and (5) mask. Also other parts of the plant were used: (6) the inner pulp of the fruit was used against ticks and fleas of dogs (a practice also known on Bonaire) but also against pimples, whereas the (7) leaves were used to heal wounds, and (8) the flowers are used against red eyes. (9) The pulp of the fruit was eaten to reduce appetite. These last uses of parts of the calabash tree were not investigated whilst in Konomerume, as the research focused on the calabash fruits. They are mentioned here merely to share the knowledge of the informants.

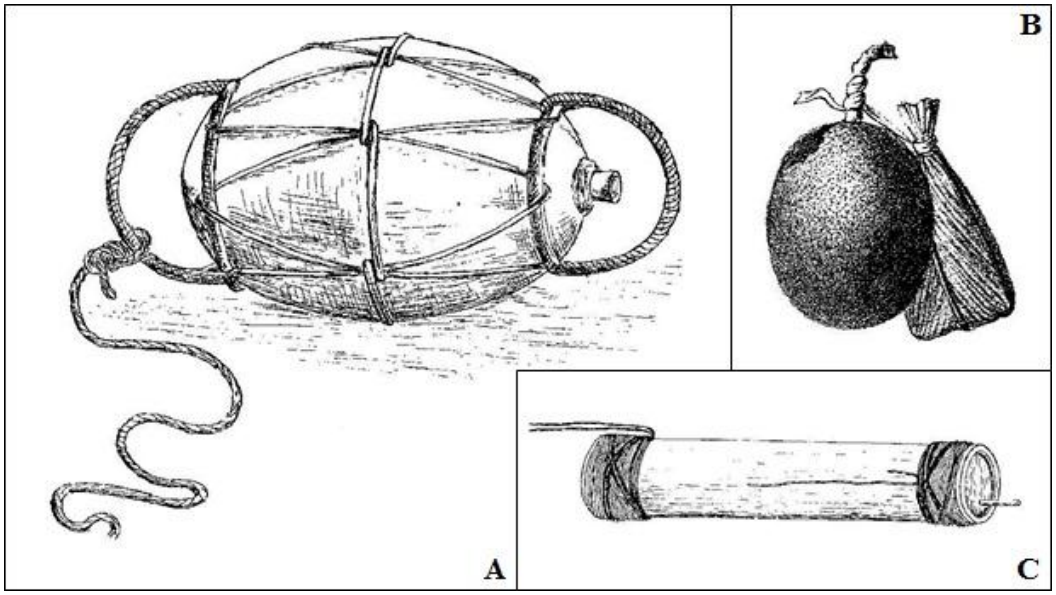


Figure 41. Other calabash objects A. Floater made of a calabash closed by wood from the Maroni River (Ahlbrinck 1931, Vol. II, 43). B. Trio calabash used for krappa-oil (Goeje 1906, 115 Pl VII). C. Paint can with calabash shell (Ahlbrinck 1931, Vol. II, 2).

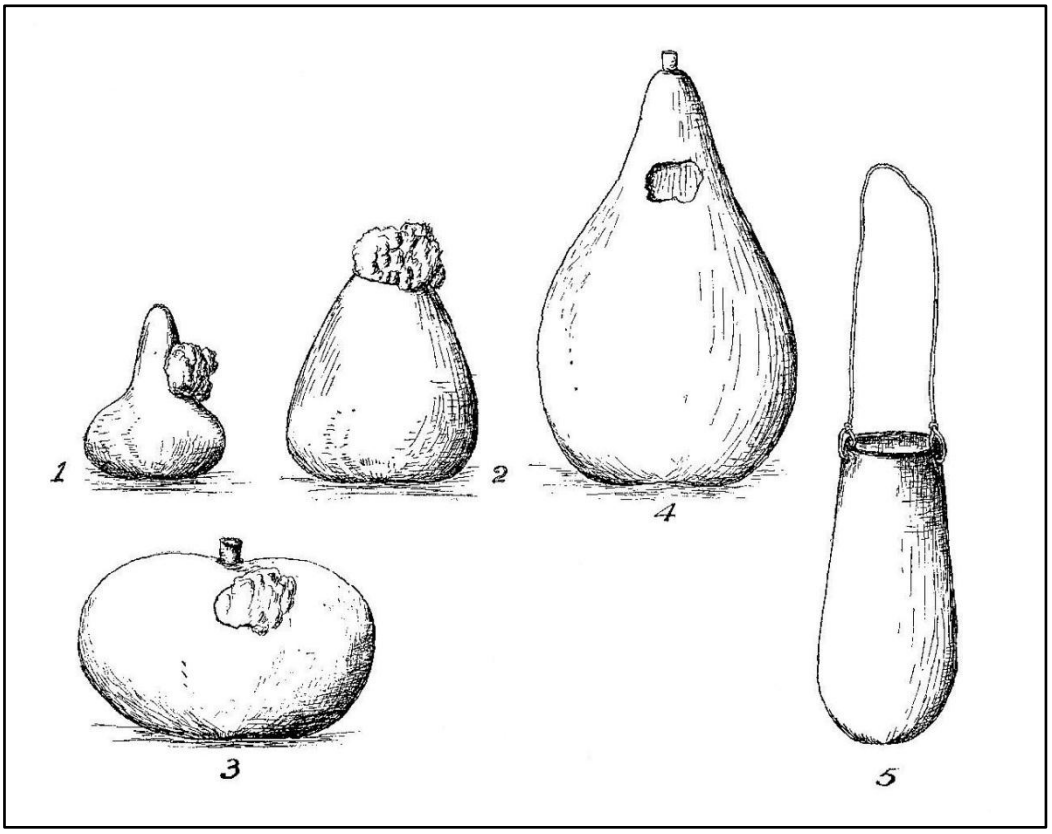


Figure 42. Drawings of several bottle gourds of different shape and size used by Kari'na. Numbers 1, 2, and 3 are used to keep *krawiru* paint whereas a plug of cotton is used to close the hole. Numbers 4 and 5 are examples of a *koro* of which 4 serves as a water bottle and 5 is used to keep seeds (Ahlbrinck 1931, Vol. II, 43).

5.4 Gourd use in Konomerume

Peoples who use these plants make a distinction between the different species, respectively *Crescentia cujete* and *Lagenaria siceraria* as the preparation method and the use are different. The Kari'na also make this distinction between the *C. cujete* and *L. siceraria*. As is mentioned before the *C. cujete* is known among the Kari'na as *kwa'i*. Price (1982, 73) states that Ahlbrinck does not make a distinction between the *C. cujete* and *L. siceraria*, however it appears that Ahlbrinck did make this distinction. The *L. siceraria* is known as (1) *piśawa*, (2) *koro*, and (3) *murútukú* (Ahlbrinck 1931, 227, 258, 310, 376).

Ahlbrinck refers to the *Lagenaria siceraria* as *piśawa* or *Lagenaria vulgaris*, "*papa-godo* and *flesh-kalebas*" in Sranantongo and Dutch respectively, a fruit of which the Kari'na make a water bottle (Ahlbrinck 1931, 376). Ahlbrinck mentions in the same encyclopedia: "werp den kalebas in het water, opdat zijn binnenste (het vruchtenvleesh) moge rotten." and he further states that this cleaned "calabash" can then be used as a water bottle. This kind of "calabash" is further known in his encyclopedia as *koro* "*godo*

and *kalebas*", Sranantongo and Dutch respectively and can be seen in fig 42 (Ahlbrinck 1931, 227). The last reference to the bottle gourd is *murútukú*, or *papagodo*: a fruit which has a variable shape, and according to Ahlbrinck is this a *Crescentia* or a *Lagenaria* species (Ahlbrinck 1931, 310). According to the drawing of the object (fig 45) it is a *Lagenaria* species. Indeed Ahlbrinck mixes the two preparation methods of the *C. cujete* and *L. siceraria* (Ahlbrinck 1931, 258; Price 1982, 73). Comparing the information of Ahlbrinck with Heiser's detailed work about different kind of gourds (Heiser 1979) and the use of the bottle gourd among the Maroons (paragraph 4.5.1), it would suggest that Ahlbrinck describes the preparation of the *L. siceraria* rather than the *C. cujete* under *kwa'i*: In order to get a perfect shell, and a fruit that is suitable as water bottle one makes a hole in the fruit where the stem is located. Then the fruit is put in water to rot out the inner pulp, and the leftovers are removed by using a stick (Ahlbrinck 1931, 258). It becomes clear that the *Encyclopaedie der Karaïben* by Ahlbrinck (1931) can be used to serve as basis for the knowledge about bottle gourds and calabashes among Amerindians and specifically Kari'na, but it must be treated with caution, and the same goes for recent sources. A complete overview of all possible names for bottle gourd and calabash among Amerindians and Maroons is given in table 16. Unfortunately the bottle gourd was not used in Konomerume and was not cultivated during the fieldwork period, but it is known to be cultivated on the plots. Due to the use of metal and plastic buckets it is not longer used as such (Kloos 1975a, 20). The following paragraphs will handle objects categories of the bottle gourd among Amerindians.

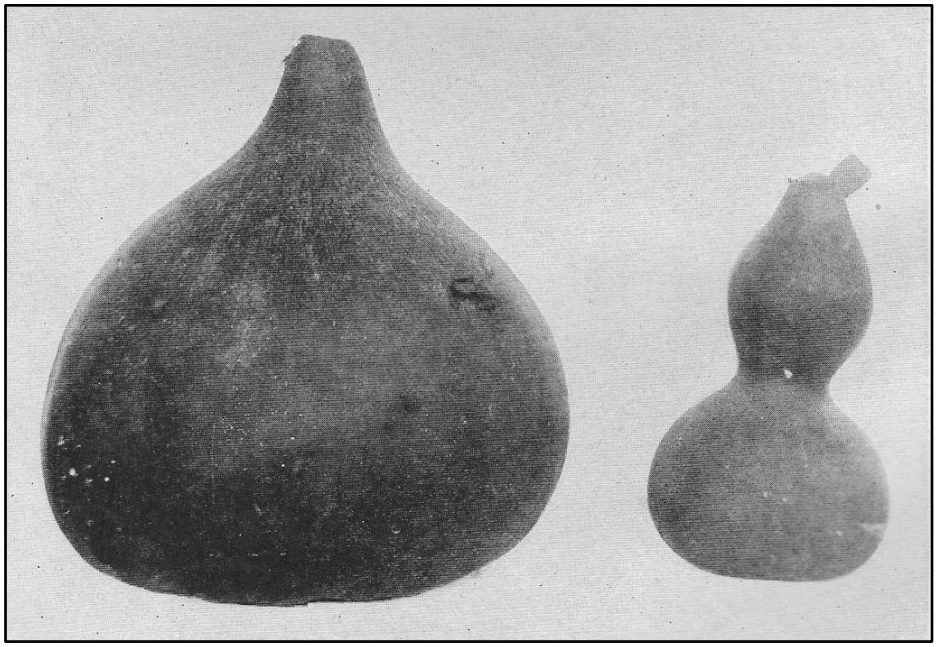


Figure 43. Two examples of gourd water bottles from Georgetown, the largest is 45 cm in height (Roth 1924, Plate 83).

5.4.1 Waterbottles

The inhabitants of Konomerume mentioned the existence of the *Lagenaria siceraria* or *pisawa*, but it was not grown in the vicinity of the village, and as such not used, but they stated that it was used in the past as a water bottle when cultivating their garden plots. However, because the *L. siceraria* was not found in the vicinity of Konomerume, they did not know for sure how this plant was treated before use. They assume that in order to use the bottle gourd the fruit was dried, after which a hole was made, and the insides of the fruit were removed with the help of a stick. What becomes clear is that the practice is similar to the practice described by Ahlbrinck (1931, 258, 376) and the one observed among the Maroons (paragraph 4.5.1). Using the gourd as water bottle is the most common purpose (fig 25 and 43) (Roth 1924, 301). These objects have holes cut into the neck or shoulder of the bottle gourd closed with old rags, clean grass or another item will be turned upside down to prevent insects from entering the hole. When a bottle gourd is used to carry along, a hole was made through which a cord was strung (Gillin 1936, 49).

The Wayana name the ceramic water bottles of the coastal Amerindians of Galibi (Kari'na) "*panakiri-toetpeu*" or "*Europeanen-kalebas*" as the Wayana themselves use calabashes as water bottles (Ahlbrinck 1931, 346; Goeje 1906, 17). Almost a century later the Wayana still use the *L. siceraria*, or *tutpë* as storage container for water, although nowadays these are replaced by metal and/or plastic buckets (Duin 2000/2001, 54), which also can be observed in Konomerume where metal and plastic buckets are preferred above gourd containers or even ceramics.

Several museum objects are known to be used as water bottles by Amerindians (table 6). Only one water bottle made by Kari'na is decorated with incisions and paintings. This object (1817-192) is known as *kuwai kolo* or "*een kalebasgodo om water in te zetten*" and the incisions are made with the help of a compass after which a layer of paint is applied. The *kolo* fruit mentioned by Ahlbrinck (1931, 227) is without a scientific name and is probably another reference to the *Lagenaria siceraria*, especially as Ahlbrinck and the Penard brothers mention that the water bottles which are made from clay are similar to the "*papagodo kolo"*, a fruit which fits the description of the *L. siceraria* and looks like some kind of pumpkin (Penard and Penard 1907, 127-128). This is confirmed by Kloos, who refers to the *ko:lo* as *Lagenaria vulgaris*, which is used to store water (Kloos 1971, 34, 299). The Penards argue that even the neck of the ceramic bottle is made straight whereas the pod of the ceramic vessels is made in such a way that it is crooket which would resemble the crooked neck of the bottle gourd (fig 44) (Penard and Penard 1907, 128). This statement is also found in Roth, where the ceramic water bottle or *prapi* adopted the natural form of the bottle gourd (Roth 1924, 302). However,

Ahlbrinck does not agree with the Penards that these ceramic water bottles are made with the bottle gourd serving as inspiration, as the ceramic water bottle is only known as *watrakan* (Sranantongo) and does not have a Carib name (Ahlbrinck 1931, 346), which is in contradiction to the statement of Roth. It is not unthinkable that bottle gourds serve as an example for pottery (paragraph 3.1).

What can be concluded from table 13 is that the bottle gourd, or *Lagenaria siceraria* was used as common water bottle not only among Amerindians, but also among Maroons, and that they were never decorated, although the collection shows several exceptions (3981-33, and U-9, whereas 1817-192 is made of a calabash *Crescentia cujete* respectively).

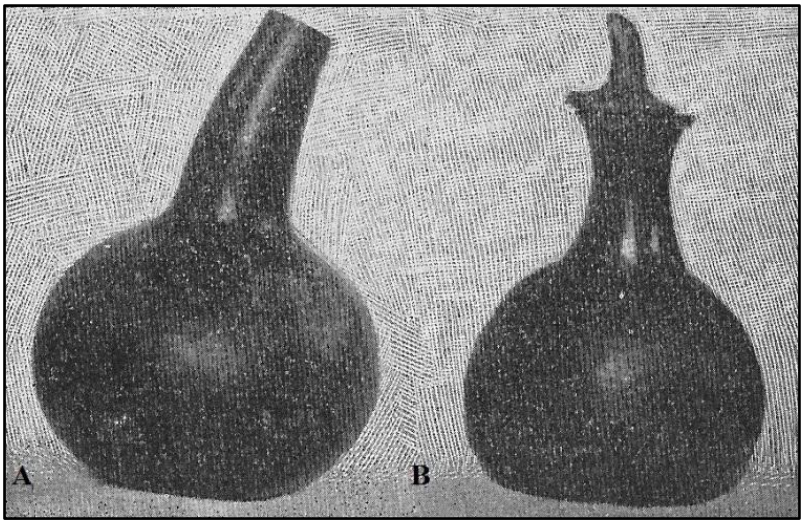


Figure 44. A. is an example of a *kolo* water bottle which served as an example of the ceramic water bottle (B), (Penard and Penard 1907, 128).

5.4.2 Other purposes

Next to the use as a water bottle, the bottle gourd is used for a variety of purposes. Ahlbrinck mentions that the *murútukú* "calabash" is used as (1) a small toy for children which are two small calabashes bound together (fig 45) (Ahlbrinck 1931, 159, 258, 310). In Galibi the *ko:lo* is used as toy for babies, especially the ones which are small (Kloos 1971, 34). Also among the Wayana are small variants of the *L. siceraria* used as toys for babies (Duin 2000/2001, 54), and this practice was mentioned before in paragraph 4.5.3 among the Maroons. Only one museum object is known to be used as a toy (1817-106) which is nothing more than a small naturally dried gourd, and is known as *mulutuku tiengi godo*, or "*een tiengiegodovrucht*" in Dutch. *Mulutuku* probably refers to *murútukú* and refers to the *L. siceraria*. Probably also other museum objects can be categorised as gourd toys based on their appearance compared to object 1817-106 (Appendix B), or

compared to figure 45. In figure 45 are two dried bottle gourds connected with a rope, and the archive documents of the Penard brothers accompany object 1817-106 which is a naturally dried bottle gourd. We are dealing with two possibilities of toys made of bottle gourds (table 16).

The bottle gourd can also be used for (2) personal hygiene. The Wayana use "een kalebasje met roode verf (roekoe)" as a toilet article, together with a comb, a mirror and two bamboo tubes filled with black paint. These four items are bound with a rope and hang around the neck of the owners, usually men (Goeje 1906, 9; 1908, 2-3). It becomes clear not only from the drawing of the object (fig 46), but also from a similar object in the National Museum of Ethnology (1443-7) that it is a gourd, and not a calabash (Goeje 1906, Pl 1, fig. 18). Another four objects (2352-148, 2352-149, 2352-150 and 2352-151) are filled with *sipé* and *onot* (red *roekoe* paint). Also krapa-oil is kept in a "Kürbis" which is decorated with incisions (Goeje 1908, 9) whereas also *tamiremüi* is kept by Trio in a "Kürbis" (Goeje 1908, 3). However, it does not become clear if Goeje refers to the *Crescentia cujete* or the *Lagenaria siceraria*. Bottle gourds among the Kari'na are used to keep *krawiru* paint (fig 42) (Ahlbrinck 1931, 43). (3) The shell of the *piśawa*, *papa-godo*, *fles-kalebas* is used as fish bait, together with *kunami*, a plant which serves as poison and *gomma* which is the residue from the squeezed cassava fluid. The *gomma* makes sure that everything sticks together, whereas the *piśawa* assures that the fish will float, and the poison will kill the fish (Ahlbrinck 1931, 239; 1947, 17). In Konomerume some informers stated that the inner pulp of the calabash (and not the bottle gourd) is used to attract the manatee, which can then be hunted. (4) Another practice is that the big variants of the *ko:lo* are used to make floats of fish nets (Kloos 1971, 34).

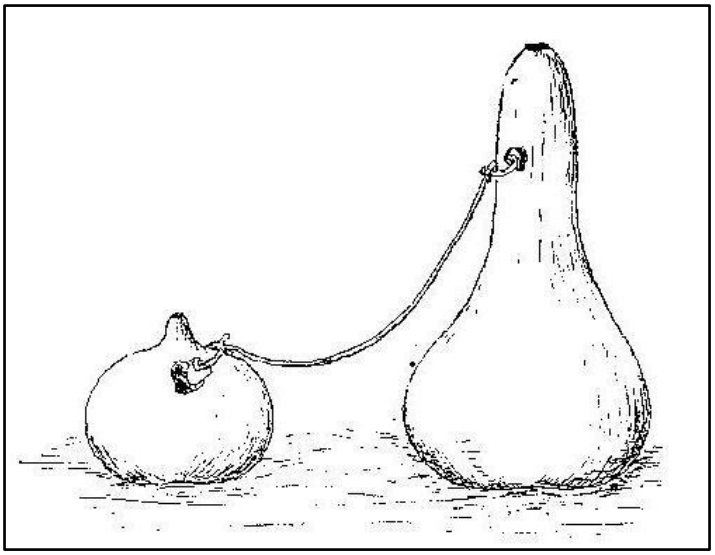


Figure 45. Drawing of a *murútukú* which served as a toy made of two *Lagenaria siceraria* (Ahlbrinck 1931, Vol. II, 19).

Gourd toys					
Accession number	**Culture**	**Ahlbrinck**	**Penards**	**Toy**	**Rattle**
360-5509	Surinamese	•		•	
360-5510	Surinamese	•		•	
1817-106	Kari'na		•	•	•
2452-710	Surinamese		•	•	•
2452-711	Surinamese		•	•	•
2452-712	Surinamese		•	•	•
2452-713	Surinamese		•	•	•
2452-714	Surinamese		•	•	•
2452-715	Surinamese		•	•	•
H-2&3	Surinamese	•		•	

Table 15. Possible gourd toys from the National Museum of Ethnology in Leiden and Stichting Surinaams Museum in Paramaribo. Objects can be seen in Appendix B and C. Note that objects 360-5509, 360-5510 and H-2&3 are comparable to fig 45, whereas the objects of the 2452 series are comparable with object 1817-106 which is known as a toy. Objects from the 2452 series are also part of table 5 in which musical instruments are discussed.

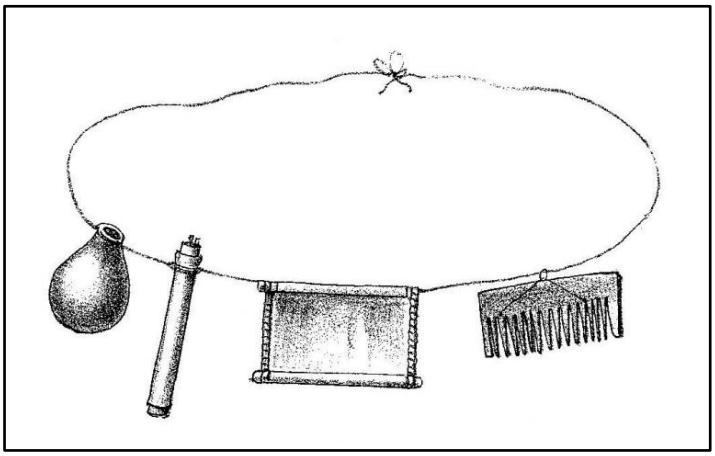


Figure 46. Drawing of the toilet articles of Wayana men, with the gourd at the left (Goeje 1906, Pl 1, fig. 18).

Latin	*Crescentia cujete*	*Lagenaria siceraria*
English	calabash	bottle gourd, gourd
Dutch	kalebas	fleskalebas
Sranantongo	godo, krabasi	godo, golu, goloe, pun, poen, papagodo, tingigodo
Aucaans	kaabasi	godo
Saramaccan	kúya	gólu, kágo gólu, tatái gólu
Arawak	iwida	horoto, kiromare
Kari'na	kuwai, kwai, kwa'i, kewai	koro, kolo, ko:lo, murútukú, pisawa, piśawa
Wayana	kalapi	tutpë, toetpeu

Table 16. Overview of the different names and writing methods of the *Crescentia cujete* and *Lagenaria siceraria* as mentioned in this thesis.

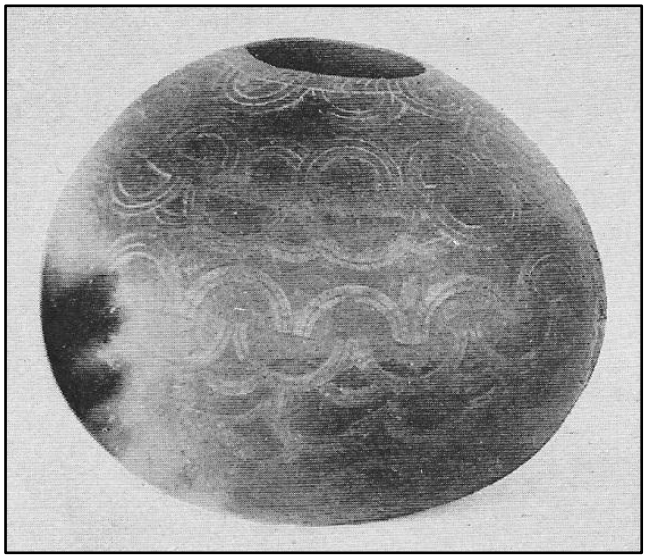


Figure 47. Example of an Amerindian calabash bowl carved with incisions, length 42 cm, Georgetown Museum (Roth 1924, Plate 83).

5.5 Decoration

It is assumed that early museum objects that were ascribed to Maroons are actually decorated by Amerindians with natural dyes (Price and Price 1980, 154). Not only is the use of natural dyes as decoration method described in travel accounts (Bates 1873, 116; Hofman and Bright 2004, 93), but this practice is also described in early overviews: Guyana Amerindians would decorate their calabashes not only with engravings (fig 47) but also with paintings (object 2012-22, Appendix B) (Roth 1924, 302).

According to Price and Price there is no influence of Amerindian decoration on Maroon calabashes, but calabashes are considered as important trade objects between the two different groups and between different Amerindians groups (Price and Price 1980, 154). The reason why these objects are considered as important trade objects is unfortunately not given. Besides, according to Panhuys identical decorations can be found at Amerindian and Maroon objects, since the latter took this from the Amerindians (Panhuys 1898, 55). According to him are smiliar frogs and toads depicted on the calabash bowls and spoons of the Maroons (fig 19) (Panhuys 1898, 68). However, comparing these with the frogs and toads made by the Kari'na in Appendix D this presumed similarity can be rejected. Not only are the drawings in figure 19 quite different from those in Appendix D, but from the next paragraphs it can be concluded that the decoration concepts of the Maroons (paragraph 4.6) are different than those of the Kari'na, and that a possible similarty is probably coincedene.

Several calabash objects of the Suriname collection of the National Museum of Ethnology were made and decorated by Amerindians. The most important calabash

objects are those of the Penard collection, series 1817. These objects were made and decorated by Kari'na Amerindians, and as such the decoration will be investigated with the help of decoration on other media, like ceramics, which are produced by Kari'na Amerindians. The research in Konomerume was focused on the use of calabashes and gourds rather than on the decoration, as it was observed that the calabash bowls decorated in Konomerume are decorated in another way than those encountered in the museum. This will be discussed in paragraph 5.5.4.

5.5.1. Decoration patterns

Among the Kari'na the pottery is decorated by women with the use of natural dyes, while solely the men make basketry and its decoration patterns (Vredenbregt 2004a, 293). In Kari'na *me:rï* means spot, drawing, writing or letter, and refers to different decorated media, for example *sabe:ra me:rï* means "a drawing on ceramic". Although *sabe:ra* is a specific kind of pottery here it is used in a more general way for pottery. Whereas *w-aruma me:rï* refers to the designs on basketry, and *yamun me:rï* refers to the drawings on the human body (Ahlbrinck 1931, 275; Cornette 1992, 73; Vredenbregt 2004a, 291, 293; 2004b, 90). The Kari'na decoration is characterised by geometric designs consisting of curvilinear lines, circles and dots (Vredenbregt 2004a, 293).

The Kari'na decoration patterns on pottery are inspired by the world that surrounds them as these are representations of the natural world and the spirit world varying from plants, animals, stars and constellations to spirits (Cornette 1992, 73; Vredenbregt 2002, 126-127; 2004a, 293; 2004b, 90-91). According to Cornette six different depicted themes exist: (1) animals, (2) plants, (3) humans, (4) spirits, (5) the sky, and (6) objects (Cornette 1992, 73-78). Some animals are depicted as a whole: examples are frogs and snakes on pottery, and jaguars on basketry, whereas other animals and plants are schematised, or schematically represented by using typical characteristics (Cornette 1992, 73; Vredenbregt 2004a, 293; 2004b, 90-91). The names for the designs refer to the specifically depicted elements (Vredenbregt 2004b, 91). Drawings of naturalistic figures are an exception and do not occur often (Ahlbrinck 1931, 279). The main figure often consists of plants, animals, stars and constellations and spirits. The animistic cosmological view of these people is represented in their material culture (Vredenbregt 2002, 144). Not only are myths depicted on artefacts, but in these myths the origin of the artefacts is explained. The decoration patterns can only be understood within the social context and the world view of these peoples (Vredenbregt 2004a, 300; 2004b, 91), something Ahlbrinck did not acknowledge for these decoration patterns (Ahlbrinck 1931, 285; Vredenbregt 2004a, 300-301; 2004b, 93-94).

The main motif or figure is surrounded by parallel lines, spots and additional figures that fill in the complete decoration surface of the object (Vredenbregt 2004a, 293). These parallel lines, dashed lines, and think lines accentuate the main figure. The filling figures depend on the area needed to complete the decoration of the whole surface (Ahlbrinck 1931, 277-278; Vredenbregt 2004a, 293). However, it is not easy to distinguish the main figure due to the completion and the enrichment of the additional figures and motifs. Especially if one considers that these smaller motifs can occur in many variations, and that boundaries between different complementary patterns are vague and hard to distinguish (Cornette 1992, 78). A categorisation of depictions was made from an etic perspective: (1) easily recognizable designs, depicting stylised frogs and toads; (2) patterns stated as "just decoration" in a typical Kari'na style; and (3) decorations made for "white men" (Vredenbregt 2002, 148-149).

The main motif is depicted in the style of the artist, and can be read by everyone. There are motifs which are only suitable for one kind of medium, as for example basketry decoration which has restrictions, but it is possible that the same motif is depicted on pottery or as body painting and carries the same name (Ahlbrinck 1931, 277; Vredenbregt 2004a, 294). Even among the Kari'na is style incorporated. For example, a matrilineal homegenity within the Kari'na style is present due to the fact that girls stay within the village of their mother (uxorilocal kinship), and are influenced by their mother and grandmothers as they learned the skill from their parents and grandparents (Vredenbregt 2004a, 295; Vredenbregt 2004b, 88). Making the objects and decorating these objects with decoration patterns is learned by observing the elders. Only in a later stadium one can make hers or his own decoration patterns (Vredenbregt 2004a, 298). Someone who is good in making pottery, or any other craft is praised for her or his skills, but is not seen as a specialist (Vredenbregt 2004b, 89). According to Collomb decoration style of the Kari'na is an example of an *ethnic style*, as their decoration style is not influenced by other groups (Collomb 2003, 129). Still within this pattern of learning and adapting from elders there was a great variety in style observed among the women of Galibi, not only between different kin groups, but also at the individual level (Vredenbregt 2004a, 295-296). In Galibi it became clear that due to the replacement of metal and plastic buckets the skills to make pottery and to decorate them was no longer transmitted to the children. Another factor is that the children go to school, which leaves less time available to learn the crafts from their parents or grandparents (Vredenbregt 2004a, 297).

According to Laddy van Putten, M.A., General Director of the Stichting Surinaams Museum, there is an analogy between the inside of the ceramic *sabe:ra* and the decorated calabashes which he collected in French-Guiana, especially with the painted decoration on the inside of one of the collected examples (personal

communication 2011). Therefore, the use of the *sabe:ra* will be discussed here in more detail. During several festivities cassava beer (*kasiri*) is consumed, for example during communal work, ritual occasions varying from burying a deceased person, the initation rite of a girl, education of a *pïjai* and certain healing rites. The *sabe:ra* is used to drink *kasiri* from, whereas the *samaku* is used to keep the *kasiri*, which is nowadays often replaced by plastic or metal barrels. The decoration on the inside of the *sabe:ra* are often specific for this kind of pottery, but can also occur on basketry or wooden benches. The decoration patterns represent animals, plants and star constellations, and are made with red-brown paint with the help of a feather or a small wooden stick. Also here the drawings are abstract and naturalistic (Kloos 1975a, 24-25; Vredenbregt 2004b, 77), and the *sabe:ra* is elaborately decorated (Cornette 1992, 79). The outside of the *sabe:ra* is decorated with simple decoration patterns (Vredenbregt 2004b, 77). According to Vredenbregt the traditional decoration motifs which are present on pottery, wooden benches, calabash cups, musical instruments and the human body are prominent features during the *epe:kodo:no* (final feast that concludes the mourning) and the *omaŋga:no* (relaxation of the mourning) (Vredenbregt 2002, 75). It is not only Vredenbregt who sees the *epe:kodo:no* as an important festivity when decorations are applied on a varity of objects and humans bodies, but Collomb also argues this (Collomb 2000, 15). The calabashes in Konomerume, although undecorated, are used to drink *kasiri* from (paragraph 5.3.3). However, it can be assumed that at least the decorated calabashes of the Penard collection were used in a similar way, and that the designs are representations of the natural world incorporated in their decoration. Especially, as the outsides as well as the insides of the calabash bowls are decorated.

Untill now, the only person who tried to explain the decoration on the calabashes of the Penard collection was Peter Duymelinck. He used the unpublished drawing books A till V of the brothers Penard. These books consist of drawings made by Amerindian informants and additional notes of Frits and Arthur Penard (Jara and van Arkel 2006, 6). Duymelink recognised several patterns on these objects which could be verified with Ahlbrinck (1931) and Penard and Penard (1907) (Appendix D for the Kari'na decoration designs). According to Duymelinck the calabash bowls were used by the *pïjai*. However, was was statedearlier the decoration on these bowls can be read by everyong, as long as he or she recognises the patterns as decoration in Kari'na style. Also everyong knew the myths behind these decoration symbols, and as such it is hard to say if they were used in a general way, or by a *pïjai*. Both in archaeology and in anthropology peculiar things ar easily ascribed as shamanistic, or used by the shaman, whereas shamanism or *pïjai*-isme is only another aspect of these peoples culture. We have to be carefull with ascribing directly something as "used by a *pïjai*". Furthermore, it is explicitely stated not only by

Ahlbrinck, but also by Vredenbregt that the decoration on pottery and other materials like the *maraca* (with the exception of basketry) is made by women. Personnaly, I think that we have to consider these calabash bowls as *sabe:ra*, used for *kasiri*, which are extensively decorated especially in the inside of the vessel.

If we compare the decoration designs with the previously mentioned categorisation made by Vredenbregt (2002, 148-149) the objects of the Penard collection can be divided in two categories based on their decoration patterns: (1) a group with easily recognizable designs, depicting stylised frogs and toads; and (2) a group with patterns stated as "just decoration" in a typical Kari'na style. However, this does not mean that the design decoration of those objects seen as Kari'na style do not represent anything in particular, it only means that at this moment, the main motif is not recognised yet, since these decoration designs have a particular meaning for their painters. The objects discussed here are the calabash bowls.

5.5.1.1 Object 1817-170

There exist four calabash bowls in the Penard collection (series 1817) which are decorated with painted designs. Object 1817-170 is a calabash bowl, with at the outside depicting five similar main figures. According to Duymelick these are representations of *Kïto* or *Wareko (w)et,-arima-rï* or frog motifs (Duymelinck 2007, 25), which can be found in Appendix D. However, comparing these five representations with other motifs it can be argued that these are rather representations of toads. For example, Panhuys depicts in his publication of 1898 a decoration on a paddle representing toads (Appendix D; Panhuys 1898, 56-57). If we compare the same decoration with the unpublished books of the Penards, it is in correspondence with page 14 of Book B. This figure is named *Pololu-siano* or "Mothers of toads", a water demon. According to Ahlbrinck (1931, 381) the toad is a guardian and is of significant importance to the Kari'na. Therefore, I propose that the design is a depiction of a toad rather than a frog.

According to Duymelinck (2007, 26) the inside of the bowl is a representation of *Siri:to*, which is a constellation of seven brother who went to the sky (Vredenbregt 2002, 127), as the main motif consists of seven diamonds. However, comparing it with the drawings collected in Vredenbregt (2002) it becomes clear that *Siri:to* is often depicted in another way (Appendix D). The diamonds could also represent for example *Wajamu-jumu* or the "tortoise house spirit" which is depicted in Book G in drawing 3 of the Penard unpublished books. This drawing is characterised by diamonds. *Wajamu* or *wayamu* refers to the tortoise (Ahlbrinck 1931, 511). Also the tortoise is an important animal in the mythology of the Kari'na. Furthermore, it is also possible that they represent *Pipa mere* or "where the transformation of the sunchildren into toads was

completed" in Book D, page 8 drawing 10. Duymelinck (2007, 26) also proposes two other possibilities: *Jaliko-mere* "road of stars to the heavenly stream" Book D, page 7, and *Alawali-mere* "the heavenly colourstream or the water of life" from Book K, page 26. Both drawings contain diamonds. How to interpret the decoration on the inside of this bowl is hard, as it becomes clear that there is a variety of possibilities.

5.5.1.2 Object 1817-171

On the outside of calabash bowl 1817-171 the same main figure is depicted as on object 1817-170. However, instead of five main figures there are now two main figures seen. Also the same main figures on the inside are depicted, but instead of seven diamonds, there are now eight depicted. This is also one of the reasons why it is not believed that we are looking at *Siri:to*.

5.5.1.3 Object 1817-172

Object 1817-172 is another calabash bowl with an elaborate drawing on the outside. According to Duymelinck (2007, 30-31) this is a representation of Orion. Because around the centre figure there are twelve dots drawn, which could refer to Book M page 1 and 4 *Mesokupo imio mere* and *Silito eptembo mere*, names of the star constellation Orion (Ahlbrinck 1931, 454; Penard en Penard, 1907). However, it could also refer to Book O, page 3 *Sapera ewatale jumu mere*, a representation of the hammock. A part of the frog motif is also drawn on the outside of the calabash bowl and can be found in Book O, page 3 which is depicted outside the circle.

On the inside of the calabash bowl the same figure is depicted as on the outsides of object 1817-170 and 1817-171. Instead of five or two main figures, there is now only one main figure. Again Duymelinck (2007, 31) argues that *Kïto* or *Wareko (w)et,-arima-rï* is depicted. However, as discussed above it can be assumed that we are not looking at a frog, but at a toad.

5.5.1.4 Object 1817-173

On calabash bowl 1817-173 on the outside as well on the inside the same main figure is depicted. According to Duymelinck (2007, 33-34) these have several explanations: *Wareko (w)et-arima-rï* (Appendix D), or it refers to Book N, page 14 to *Apati wali* or "hangmat van touw" (hammock or rope) and *Pati;nimioku* "hoe hangmat te maken" (how to make hammock). However, it can also refer to *Pololumio* or "Young toad" of Book B, page 13.

What becomes clear from only these four objects is that ascribing a name to the main figure is difficult, and that completely grasping the full meaning of these decoration patterns is even harder. The best way of researching the decoration motifs of the Kari'na would be to explore the manuscripts of the Penards, to integrate other sources like Ahlbrinck and Panhuys, add the various drawings of Kloos, Spoelstra, and Vredenbregt (Appendix D), and besides to do field research and to integrate the present knowledge of the Kari'na themselves, as they will probably understand these decorations better. This falls outside the scope of this study, but is a topic of future research. To conclude, for sure these decoration designs represent stylised mythological representations just as those on ceramics and basketry.

5.5.2 Paints

Among the Kari'na several paints are made of natural dyes and these are mostly used while decorating pottery showing fine-lines (Vredenbregt 2002, 122; 2004b, 85). Besides, these natural dyes are also used to decorate for example the skin of the *sambu:ra*, a drum (Vredenbregt 2002, 106), and as such it can be assumed that these natural dyes were also used to decorate the calabash objects of the Penard collection. Especially, as it is stated by Vredenbregt that the calabash of the *maraca* is completely covered with *ka:rawi:ru* paint to make the decoration patterns (Vredenbregt 2002, 106). A recent analogy can be found in French-Guiana where Kari'na natural dyed decorated calabash bowls were encountered, like that found on *sabe:ra* pottery (personal communication Laddy van Putten 2011).

The *ka:rawi:ru* paint is a beige to light-brown dye. It is made from the liana of the *Bignonia chica* by collecting the red coloured leaves during the dry season, and cooking them in water. The red bark of the *wosiwosi* tree (*Vochysia guianensis*) and the leaves of a schrub called *pirapisi* are added to the water to release the red pigment of the liana. This mixture is cooked until the thickness has become syropy, then it is sifted to remove the large particles after which it is strained through a cloth. The residue is left to dry and to harden, after which it can be used. To apply this residue on pottery or to use it as facial paint, other plant extracts are added (Vredenbregt 2002, 125; 2004b, 86).

In paragraph 5.3.3 it was mentioned that the calabash bowls in Konomerume were painted with sweet potato. It is possible that this was done with *ka:rasai* which is the name of a species of the *na:pi* or *Ipomoea batatas* which is used as dye. Both the peel and the tissue of this sweet patato are dark red and gives a purple-reddisch colour. It is therefore used to give *kasiri* a purple colour. The tuber is grated and the mixture is

squeezed which gives a thick red juice to be used as paint for pottery. It cannot be stored (Andel and Ruysschaert, 173-174; Vredenbregt 2002, 125; 2004b, 87).

Another plant dye is *kume:tï*, a reddish brown dye extracted from the yellow wattle (*Vismia guianensis*). The bark of this tree is collected with the help a knife, after which the bark is put in a bowl with water and then sqeezed. After sieving the extract is ready to be used and stored. When the extract is used in its pure form it gives a reddish-brown dye, whereas mixed with other paints like *kuse:we* it can give a redder or black paint (when soot is added). It is used on pottery as well to colour cotton (Vredenbregt 2002, 122; 2004b, 85). *Kuse:we* is extracted from the seeds of a bush (*Bixa orellana*) and it gives a bright red dye, which is used to paint pottery, cotton and hair, and can be added to *kume:tï* to give an even more red colour (Vredenbregt 2002, 122, 125; 2004b, 85). A black dye is made of the black (*karai*) soot from under the cassava griddle (*arina:du*), and is known as *karai* or *arina:du karai:rï*. This dye is used with other materials to colour for example basketry, or facial paint (Vredenbregt 2002, 125; 2004b, 86).

There are three colours used for the calabash objects in the Penard collection, a reddish brown dye, a beige till light-brown dye, and a black dye. An overview of the objects with their different paints is given in table 17. This table shows that the beige till light-brown dye is only used as a ground colour of the objects after which the motifs are applied with a reddish brown dye or a black dye. Whereas the reddish brown dye is mostly used to paint motifs with, on several occasions this dye was used as ground colour next to the beige till light brown dye. For example spoons are painted on the outside with the beige till light brown dye with reddish brown motifs, whereas the inside was only painted with the reddish brown dye. The black paint was only used to apply motifs on the ground colours. One can conclude that the beige till light brown dye is only used as ground colour whereas the reddish brown dye is used as ground colour, but also to paint motifs, and the black dye is only used to paint motifs. However, this does not mean that the paints were restricted in their use, althought the few objects encountered might lead to that conclusion.

It is interesting to notice that the decoration of the contemporary Kari'na can be compared with those of the historic Island Caribs. Not only is the decoration of the pottery but also those of the *coui* or calabashes, used to serve food and to drink cassava beer from, decorated with all over painted red and black designs which have rectilinear and curvilinear designs. Especially as it is assumed that there is a cultural affliation between the Island Caribs and the Kari'na of the coastal Guianas (Boomert 1995, 26-27). It was observed by Raymond Breton, a French missionary, that the historic Island Caribs used calabashes of various sizes as their spoons and drinking cups and that they were decorated by women (Besada Paisa *et al*. 1999, 101, 128, 220).

Paints					
Object category	**Accession number**	**Beige - light brown**	**Reddisch brown**		**Black**
		Overall	**Design**	**Overall**	**Design**
Bowls	**1817-170**	•			•
	1817-171	•			•
	1817-172	•			•
	1817-173	•			•
Spoons	**1817-141**	•	•	•	
	1817-142	•	•	•	
	1817-143	•	•	•	
	1817-144	•	•	•	
	1817-148	•			•
	1817-149	•			•
	1817-150	•	•	•	
	1817-151	•	•	•	
Containers	**1817-136**	•	•	•	
	1817-137	•	•		
	1817-138	•	•	•	
	1817-139	•	•	•	
	1817-145	•			•
	1817-146	•			•
	1817-147	•	•		
Spindles	**1817-154**			•	•
	1817-156			•	•
	1817-157			•	•
	1817-158			•	•
	1817-159			•	•
	1817-160			•	•
	1817-161			•	•
	1817-162			•	•
Sunction device	**1817-163**	•			•
	1817-164	•			•
	1817-165	•			•
	1817-166	•			•
Container	**1817-192**	•			
Maraca	**1817-198**			•	•

Table 17. Overview of the painted objects in the Penard collection with the three paints: beige light-brown dye, reddish brown dye, and a black dye. All objects can be found in Appendix B.

5.5.3 Engravings

Considering engravings, two objects from the Amerindian objects of the Penard collection are worth discussing. This is object 1817-140 a calabash container consisting of a bowl with a cover. Both the bowl and the cover have each two groups of three engravings, of which the center group is almost erased when the border of the bowl was made. When the engravings are compard to object 1817-250, an object made by Maroons, they seem shallow, as object 1817-250 has deep engravings.

The water bottle, object 1817-192, known as *kuwai kolo*, has a surface treated by scraping the upper surface layer off and painting it with yellowish brown paint. Underneath the paint layer we can see several engraved circles which are probably made with the help of a compass. That the surface is scraped off becomes clear from the irregular scratches which are clearly covered by the paint. It seems as if an attempt was made to hide the engraved circles by scraping the upper surface off and painting it over.

Another object which is not from the Penard collection, but interesting enough to discuss here is object 2324-667. It is a calabash bowl, which is completely painted on the inside with black paint, whereas the outside is engraved. These engravings are made in typical Kari'na design, and are filled with black dye. A similar combination of decoration methods was observed among the Kari'na in French Guiana by Laddy van Putten in 2010, where the outside of a calabash spoon was decorated with engravings in typical Kari'na designs, but was not filled with black dye (personal communication 2011). To my knowledge this is one of the most recent examples of an engraved Kari'na calabash spoon known.

According to Price and Price (1980, 154) are the Amerindian calabashes decorated with engravings characterised by minimal decoration designs and are the engravings rather crude executed. It becomes clear from the examples above that there exists indeed a variety in execution, but that these objects are not minimal decorated and also not crudely executed. As we only discussed engraved Kari'na calabashes it is worth noting that there also exists an engraved Wayana bowl in the collection of the Museum of the Tropics in Amsterdam (object 3537-1). Furthermore, these three objects seem to be exceptions rather than standard objects if we compare them to the Penard collection. However, from the National Suriname Museum we know some calabash bowls which were carved on the outside (Appendix C), and also the bowls of Konomerume are an example of engravings on calabash objects. Museum collections are not a representation of all the possibilities of decoration methods. As such we cannot exclude engraving from the possible decoration techniques, especially as some objects like 2324-667 show the typical Kari'na decoration style.

5.5.4 Calabash decoration in Konomerume

The calabash cups during this fieldwork encountered in Konomerume were incision-decorated, un-painted cups, although non-decorated cups were also encountered (fig 23). If asked which figurations could be used as decoration, the answer often mentioned: everything was possible highly depending on the carver. Often villagers recalled that decoration served as marking in order to recognize their personal cup.

This fieldwork points out that it is incorrect to state that Amerindians nowadays no longer carve calabashes as the Prices argue (Price and Price 1980, 154). They asked Peter Kloos conducting fieldwork among the coastal Caribs, and Peter Rivière researching among the Trio gave statements to the Prices of Amerindians decorated their calabashes, but in both cases decorated calabashes were not encountered (Price and Price 1980, 220). It seems as if specific fieldwork among Amerindians was not carried out, not on calabash use in general and neither on calabash decoration. Apparently it was not practised then, however, this does not mean that it will never be practised again. Of course it is hard to say if the practise of decoration on calabashes is an old tradition, or a new tradition. An informant stated that there was a plan to earn some money by producing decorated calabash artefacts in order to sell them to tourists travelling in the summer months to Konomerume by airplane or boat. However, this project was not developed, and people still produce calabashes mostly for their own use. It can be assumed that this project was mentioned by villagers since they know of the Maroon calabash art which is sold on the markets and tourist-shops in Paramaribo. An informant even stated that the carving of calabashes has been introduced. Konomerume is located near Paramaribo, and although it takes quite some time to travel back and forth, they are aware of the possibilities other people use to make a better life for themselves.

Taking everything into consideration it seems that tradition or even "style" change over a period of hundred years and are probably influenced by acculturation and possibly also creolization (Carlin and Goethem 2009, 12-15). The calabash decoration in Konomerume may look to some as a degeneration of culture, but can be best seen as an adaptation or change of material expression (Vredenbregt 2004a, 302), especially if one considers that it was first assumed that calabash use, and decoration, were not any longer performed. The only way to get a clear view on these processes is long term research not restricted to one village, and to include other villages of the Wayombo area, e.g. Corneliskondre, Kalebaskreek, and Tapuripa, especially as these villages have family ties with Konomerume. It needs to be mentioned that the research carried out in Konomerume was not focused on the decoration, but rather on the calabash use in general, and that as it turned out that calabashes were only decorated sparsely, specific information was hard to get. The only success with regard to information was that one of the elderly informants stated that she knew some decoration motifs like "grashoppers legs" (Appendix D).

5.6 Summary

Konomerume is a Kari'na village along the Wayombo River, and is probably named after pater Petrus Norbertus Donders. Another explanation for the name is the weather conditions of thunder and lightning. Konomerume is a Kari'na village, but also Lokono and Warao live here. They speak the *Aretyry* dialect of the Cariban language, which is also known as *Murato*: it would refer to intermarriage between Kari'na from western Suriname with Saramaccan or Kwinti groups. However, they see themselves as Kari'na.

In Konomerume calabash trees are planted near the houses. The calabash tree and its fruit are known as *kwa'i*. The inner pulp is removed with the use of a spoon or knife, boiled and sundried. Often a male person in the family cuts the calabash into two parts, after which the object is finished by the woman. The Kari'na acknowledge at least two different calabash fruits, known as (1) *posi* - small and tapering used as spoon or cup; and (2) *mekopupo* – small kind used as suction device.

Calabash bowls are known as *kwa'i*. They are used (1) to drink cassava beer or water; (2) scoop water; (3) during bathing; or (4) as ladle or spoon. The calabash bowl is preferred above metal or plastic cups, as it maintains the temperature and taste of the *kasiri*. Menstruating women use metal or plastic cups to prevent pollution. Calabash cups are are also used among the Wayana to serve or drink *kasiri*. Calabash spoons were not observed in Konomerume, but they are known from museum context: (1) *tupo* – large spoon or plate, (2) *posi* – small spoon. Calabash bowls were used as containers to store small items. Two-piece containers are known from themuseum collections, but were not observed in Konomerume. Two-piece containers are used: (1) to keep food, beverages or other small items; (2) *musokoloi jene* - to keep worms for fishing trips. The distinction between bowl, spoon and container is not as clear among the Kari'na as among Maroons.

Spindles or *kuit'a* are made by men from *letterhout* and calabash shell, but are owned by women. The spindle stick is decorated with engravings, whereas the spindle disks are decorated with engravings and paintings. The spindles diks made by the Wayana are engraved. Old calabash cups as well as new calabash shells are used for modelling tools – *kupewa*. They are used (1) to remove surplus clay, (2) to make the wall straight, and (3) to make the surface smooth. Several examples of different sizes and shapes are known and are used for specific purposes while making pottery.

The rattle or *maraca* is used during celebrations, and was used in former times by the *pïjai*. A distinction can be made between *maracas* from the Kari'na and those of the Arawak. The Arawak *maracas* are decorated with parrot feathers, whereas the Kari'na *maraca* is only decorated with paint by women. Another musical instrument is the *wun-wun* (Kari'na) or *wung-wung* (Wayana). They are made of calabashes or gourds, and were

used in earlier times by the shaman. When used it gives a specific sound which chases away angry spirits. The Wayana made of the same kind of calabash or gourd whistles and *fluittollen*. Unknown are the small bottle gourds with rope from Galibi which are decorated with paintings. The suction device made of a small calabash (*mekopupo*) is used by the *pïjai* to treat accumulation of fluids, joint and rheumatic pains. Furthermore, the calabash is used as container to store krapa-oil, as a floater, and for medicinal purposes.

The bottle gourd is known among the Kari'na as, *pišawa*, *koro*, and *murútukú*, and is hollowed out and leached out before use. In Konomerume the bottle gourd is known as *pišawa*, but was not grown in its vicinity or used as metal and plastic buckets replaced the bottle gourd container. The bottle gourd is used as a water vessel among Amerindians, and is almost never decorated although some decorated examples in museum collections are known. The Kari'na took the shape of the bottle gourd for some pottery vessels. Furthermore, the bottle gourd is used as a toy, for personal hygiene and to store paint, as fish bait, and as fish floats.

The decorations of the Kari'na pottery are representations of the natural world and the spirit world varying from plants, animals, stars and constellations to spirits. These decorations are also depicted on other media. The main motif or figure is surrounded by parallel lines, spots and additional figures that fill in the complete decoration surface of the object. Despite that the main motif is depicted in the style of the artist it can be read by everyone. It is probable that the same kind of paints used for pottery were also used for the calabashes in the Penard collection. The Kari'na of French-Guiana still use natural dyes to paint calabashes. These decoration patterns are the same which are applied on the *sabe:ra*, a pottery type used for drinking cassava beer. In Konomerume the calabashes were only sparsely decorated with engravings.

Chapter 6 Conclusion

6.1 Aims and research questions

One of the aims of this thesis was to make a clear distinction between calabashes (*Crescentia cujete*) and bottle gourds (*Lagenaria siceraria*) with regard to their biological family, use, production and decoration. Another aim was to gather all possible information with regard to use, production and decoration of calabashes and gourds used by Amerindians in Suriname in order to make a clear overview and to compare this with the knowledge about the same fruit species among the Maroons of Suriname in order to see if these groups influenced each other. Furthermore, it will become clear that these fruits took an important place in the material culture of past societies. The following questions were formulated:

- What do we know about the use, production, decoration and iconography of calabashes and gourds by Amerindians and Maroons in Suriname?
- Has there been exchange in the way of using, producing and decorating calabashes and gourds between Amerindians and Maroons?
- What are the implications of these items for pre-Columbian archaeology?

6.2 Methodology

This research uses several kinds of sources: a literature study made clear the biological distinction between calabashes and bottle gourds respectively. With the help of the literature study and an inventarision of museum objects it was possible to show how these fruits were used among Maroons and Amerindians. The sparse literature data about the use among Amerindians was supplemented with short-term fieldwork carried out in Konomerume in July till September 2010, whereas the investigation of the museum objects in the National Museum of Ethnology in Leiden was conducted from December 2010 till the end of March 2011. Also a visit in the summer of 2010 to the Stichting Surinaams Museum in Paramaribo, gave new insights into the calabash and gourd use among Amerindians, not only did they have some Amerindian object categories absent in the museum in Leiden, but Laddy van Putten had recent information on the calabash use among Kari'na in French-Guyana.

Due to logistics the literature research for the museum objects was performed before the fieldwork in Konomerume, followed by the actual object study. It would have been easier if the object study was directly done after the literature study, as the

knowledge retrieved from the object study would have influenced the research in Konomerume. Also, the short-term fieldwork in Konomerume had its effect on the research as it takes some time to become acquainted with the village peoples, their habits and customs. While this thesis gives a first overview of the use among Amerindians, the results show a promising start for further research, in which long term fieldwork combined with literature research and object study could address more structural hypothesis.

6.3 Results

In Chapter 2 dealing with the natural setting of the bottle gourd (*Lagenaria siceraria*) and the calabash (*Crescentia cujete*) it was stated that the bottle gourd was native to Africa, and that the plant was probably dispersed over the rest of the world by peoples rather than ocean currents as the shell of domesticated bottle gourds are thicker than the whild ones. Not only do DNA samples suggest that cultivars and landraces of bottle gourds in the New World can be ascribed to *L. siceraria* ssp. *asiatica* rather than *L. siceraria* ssp *siceraria*, but also the rind thickness of archaeological examples found in the Americas suggests that the bottle gourds were already domesticated before their introduction in the New World. This supports the hypothesis that the bottle gourd was domesticated twice: an early domestication in Asia and a later domestication in Africa. In the specific case of Suriname two bottle gourd cultivars are known: a small bottle shaped and a large round bottle gourd. Because of the bitter taste of these fruits cased by the compound cucurbitacins, it is prepared: peoples in Africa, but also in Suriname immerse the fruit into water to leach out the bitterness in order to use the empty fruit as container for liquids. The calabash is native to tropical America, and there exist several cultivars in Suriname. Only after the discovery of the Americas, the distribution of the calabash tree over the rest of the world started.

While studying the objects in the National Museum of Ethnology it was noticed that the bottle gourd can be clearly distinguished from the calabash. Microscopic examination of the cellular structure, rind thickness, smoother finish inside calabash, generally larger fruit size of bottle gourds, and black glossy finish of decorated calabashes are the general distinctions which can be made between the two species. Two additional characteristics can be added: the lepidote-punctated outside of the calabash and the difference in the shape of the part where the fruit was attached to the tree/vine can now be added and makes the distinction based on visible fruit characteristics for these fruits more reliable. Not only is the distinction between these two species of importance to biology, but also to the people who use these materials. This leads to the next question:

What do we know about the use, production, decoration and iconography of calabashes and gourds by Amerindians and Maroons in Suriname?

The Amerindians of Suriname have extensively used (and are still using) both the calabash (*Crescentia cujete*) and bottle gourd (*Lagenaria siceraria*). Most of the knowledge on the use is derived from the Kari'na of the coastal area. Moreover, also other Amerindian groups used these fruits, like the coastal Lokono (Arawak) and the Wayana and Trio from Southern Suriname. It becomes clear that calabashes as well as bottle gourds are important resources of objects which are not only occasionally found in the archaeological record, but moreover are abundantly part of various collections (both the National Museum of Ethnology in Leiden and Stichting Surinaams Museum in Paramaribo).

The museum collections consist of calabashes that were used as drinking cups, spoons, containers, spindles, modelling tools, *maracas* and other musical instruments, like the *wun-wun*, and as a suction device for medical puposes. Several of these categories were observed in Konomerume, respectively bowls, spindles, modelling tools, and the *maraca*. However, the *maraca* is not any longer exclusively used by the *pïjai* or shaman, but during festivities. Several categories which were observed in the museum collections where not used anymore, at least not in the form as in the museum collections. For example, the containers which are known from the Suriname collection of the National Museum of Ethnology were not encountered as such in Konomerume. Instead, calabash bowls were used as containers without any cover. Spoons were known from the past, but no longer used, whereas the suction device for medical purposes was known and occasionally used, but not during the fieldwork period.

During fieldwork it was noticed that the Kari'na recognise different kinds of calabash cultivars, which have their own specific kind of purpose. At least two cultivars were mentioned during the fieldwork period: (1) *posi* - small and tapering used as spoon or cup; and (2) *mekopupo* – small kind used as suction device. Another observation was the use of the calabash bowl during festivities where *kasiri* (cassava beer) was served. While in general the consumption of *kasiri* is done from the *sabe:ra*, a specific kind of poterry, in Konomerume the calabash bowl had this function. Morever, this practise was also observed by various researchers in other places. If we consider that the calabash bowls of the National Museum of Ethnology are painted with decoration designs in the typical Kari'na style, and that this is also known for calabash bowls in French-Guiana and Galibi it can be assumed that calabashes were equally important as the *sabe:ra* pottery. In contradiction to the decorated examples of French-Guiana and Galibi the calabash bowls of Konomerume were not decorated with the typical decoration designs of the Kari'na,

but showed rather simple engravings, but in contradiction to others calabashes are still a lively medium of decoration.

Among the Amerindians the general use of the bottle gourd was as container for water or other liquids, but is nowadays often replaced by metal and plastic buckets. Sometimes it was used as a container for paints, or as fish float. In the vicinity of Konomerume it was not grown and as such not used. Known from the museum collections the bottle gourd was sometimes also used as toy. Objects made of bottle gourds were and are often not decorated with any kind of decoration. Also among the Kari'na it is possible that they recognise several cultivars, but this is mainly known from the literature: *piśawa*, *koro*, and *murútukú*.

The Maroons use calabashes in a similar way as Amerindians: as (covered) containers, bowls, spoons, and calabash rattles. However, in contradiction to the calabash objects used by Amerindians they are categorised in great detail, and several cultivars have been identified. It is evident that the decoration among Maroons has developed from the moment the Africans set their first feet on American land after being brought as slaves to Suriname untill the present day. Among them the calabash art is not only a lively art, but has undergone also several social processes influencing this art. The bottle gourd is used as a water vessel among the Maroons, and besides also as material for musical instruments and probably also as spoon. It is often not decorated, although there are some examples known which were decorated, but these are museum objects.

Has there been exchange in the way of using, producing and decorating calabashes and gourds between Amerindians and Maroons?

Price and Price stated that calabashes and gourds could be seen as important trade objects, and that no influence on Maroon decoration of the calabashes was present (Price and Price 1980, 154). It can be argued that these communities influenced each other. Not only had the Maroons adapt to a new environment, but Amerindians and Maroons became also neighbours. Recent archaeological evidence suggests that these communities were formed not only of African slaves, but also from African slaves and Amerindians. It is known that Maroons adapted the shifting-cultivation strategy, that they incorporated Amerindian spirits in their own religion, and that a trade language developed consisting of Maroon and Amerindian languages. It is not unthinkable that they adapted the production methods or the way of using these fruit from the Amerindians, but they already knew how to use the bottle gourd from Africa. The Maroons probably knew the calabash tree and the bottle gourd from the plantations, and were forced to use them even more intensively, as they could not depent on the stolen equipment of the plantations. It is not surprising that they went using the calabash tree, with characteristics more favourable for decoration than the

bottle gourd. Although the decoration of the two groups did not influence each other, one can imagine that the recent observations in Konomerume, of non-typical Kari'na decoration, is a recent development.

What are the implications of these items for pre-Columbian archaeology?

If we consider what a wide range of objects present day communities make of these materials, it might be assumed that before the discovery of the Americas calabashes and gourds were probably even more generally and intensively used. Due to their perishability the bottle gourd and calabash are only found occasionally in the archaeological record. The archaeological evidence suggests not only that these materials provided the first models upon which early pottery was based, but that they were also used next to their ceramic counterparts, and that they had a vast role in the material culture. The Kari'na used the shape of the bottle gourd for their ceramic water bottle, and it was observed in Konomerume that calabash bowls were used in a similar way as the *sabe:ra*: to drink cassava beer from. Especially, as the same decorations are applied to calabash bowls in museum collection, which is also observed among archaeologically found examples. Calabashes and gourds are like ceramics, important aspects of material culture. And thus perishable materials should be regarded as evenly important for deducting archeological evidence.

6.4 Recommendations

This thesis probably gives only a glimpse of the use of calabashes and gourds among Amerindians. For sure the research about calabashes and gourds among the Maroons is much further developed than among the Amerindians. There is more research needed to what kind of calabash or bottle gourd cultivar is used for what especially among Amerindians. With regard to the Kari'na decoration of the calabash bowls (and other calabash objects) more detailed information is needed on the decoration in general. An important source material which could help with this research is the manuscript of the Penards which needs further research. Also the Maroon iconography could be explored more, as only some decoration patterns are known. The calabash object categorisation among the Kari'na needs a closer look on the correctness and strictness of categorization of the objects. The development of this is of importance to the Western world, academia and - not in last place - to the Amerindian people who used these items. Moreover, due to creolisation and westernisation their societies are transforming, maybe changing, and thereby being effected by reduction of information within the material culture, the known history and the cultural heritage of these peoples.

Abstract

This thesis gives a detailed overview of the use, production, decoration and iconography of calabashes (*Crescentia cujete*) and bottle gourds (*Lagenaria siceraria*) among the Amerindians and Maroons of Suriname. This is the first time that such an overview is made for Amerindian calabashes and gourds. Next to that it will also investigate the possible exchange between Amerindians and Maroons in relation to calabashes and bottle gourds, as it can be assumed that these two groups lived in much closer contact than previously thought. Furthermore, it will become clear that these fruits had a much more prominent role in the material culture of pre-Columbian societies. Not only did they serve as model for early pottery, but they were also used alongside their ceramic counterparts. For this research a wide range of sources is used, varying from literature research to museum collections of the National Museum of Ethnology in Leiden and the Stichting Surinaams Museum in Paramaribo which is supplemented with fieldwork in Donderskamp, Konomerume, a Kari'na village along the Wayombo River.

Samenvatting

Deze scriptie geeft een gedetailleerd overzicht van het gebruik, de productie, de decoratie en de iconografie van kalebassen (*Crescentia cujete*) en fles-kalebassen (*Lagenaria siceraria*) onder Inheemsen en Marrons van Suriname. Dit is de eerste keer dat een dergelijk overzicht gemaakt is over kalebassen en fles-kalebassen van de Inheemsen. Daarnaast is ook onderzocht naar de mogelijke uitwisseling tussen Inheemsen en Marrons met betrekking tot kalebassen en fles-kalebassen. Het kan worden aangenomen dat deze twee groepen in nauwer contact leefden dan eerder was verondersteld. Bovendien zal het duidelijk worden dat deze vruchten een veel prominentere rol in de materiële cultuur van pre-Columbiaanse samenlevingen hadden. Niet alleen dienden ze als model voor het eerste aardewerk, maar ze werden ook gebruikt naast hun aardewerken tegenhangers. Voor dit onderzoek zijn verschillende soorten bronnen gebruikt, variërend van literatuuronderzoek, museum collecties van het Rijksmuseum voor Volkenkunde in Leiden en de Stichting Surinaams Museum in Paramaribo tot veldwerk in Donderskamp, Konomerume, een Kari'na dorp langs de Wayombo River.

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